C. SULFER.

TOTAL ADDING CASH REGISTER.

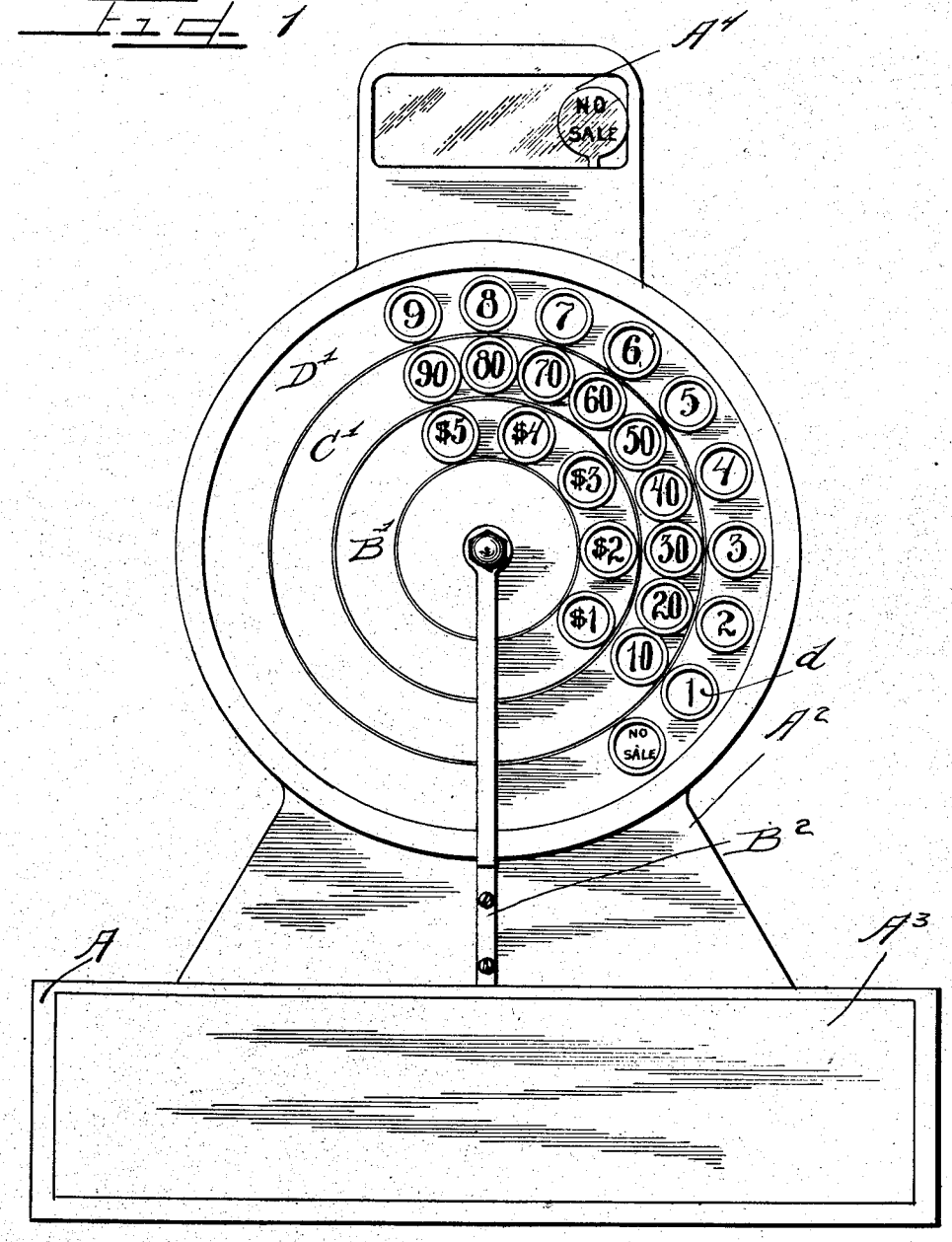
APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 1.

Fig. 1



Witnesses

J. St. Angell.

W. B. Hannah

Inventor

Charles Sulfer.

by Charles W. Hills Atty.

C. SULFER.

TOTAL ADDING CASH REGISTER.

APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 2.

Fig. 2

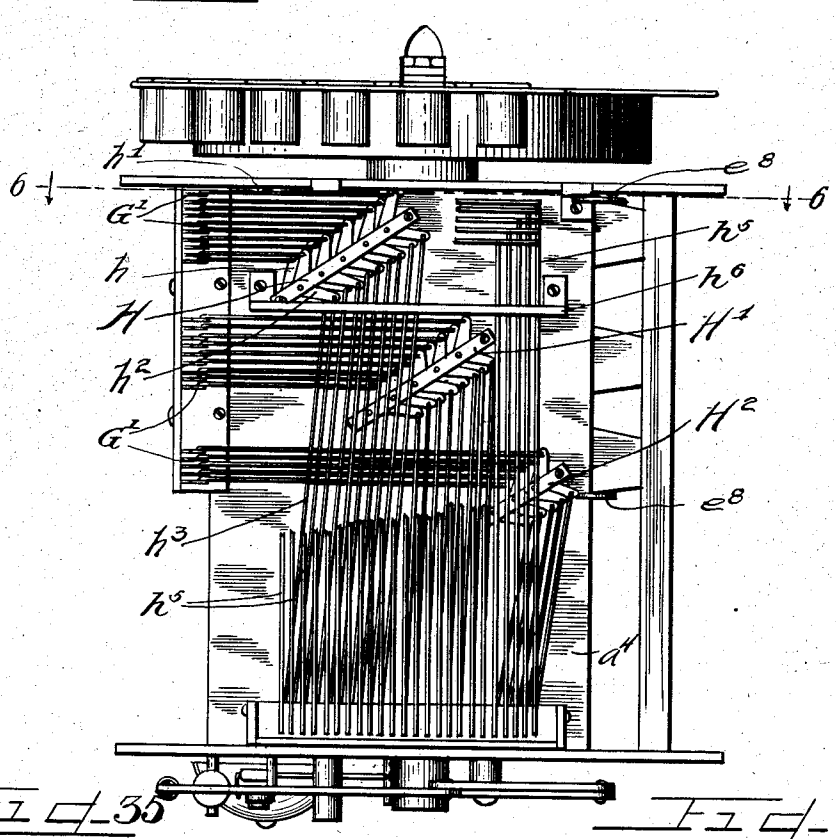


Fig. 35

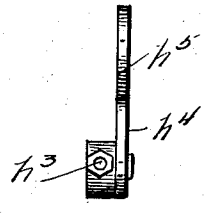
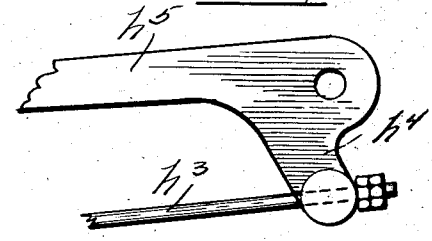


Fig. 34



Witnesses

J. W. Angell

H. E. Hannah

Inventor

Charles Sulfer.

by Charles E. Sells

Atty.

C. SULFER.

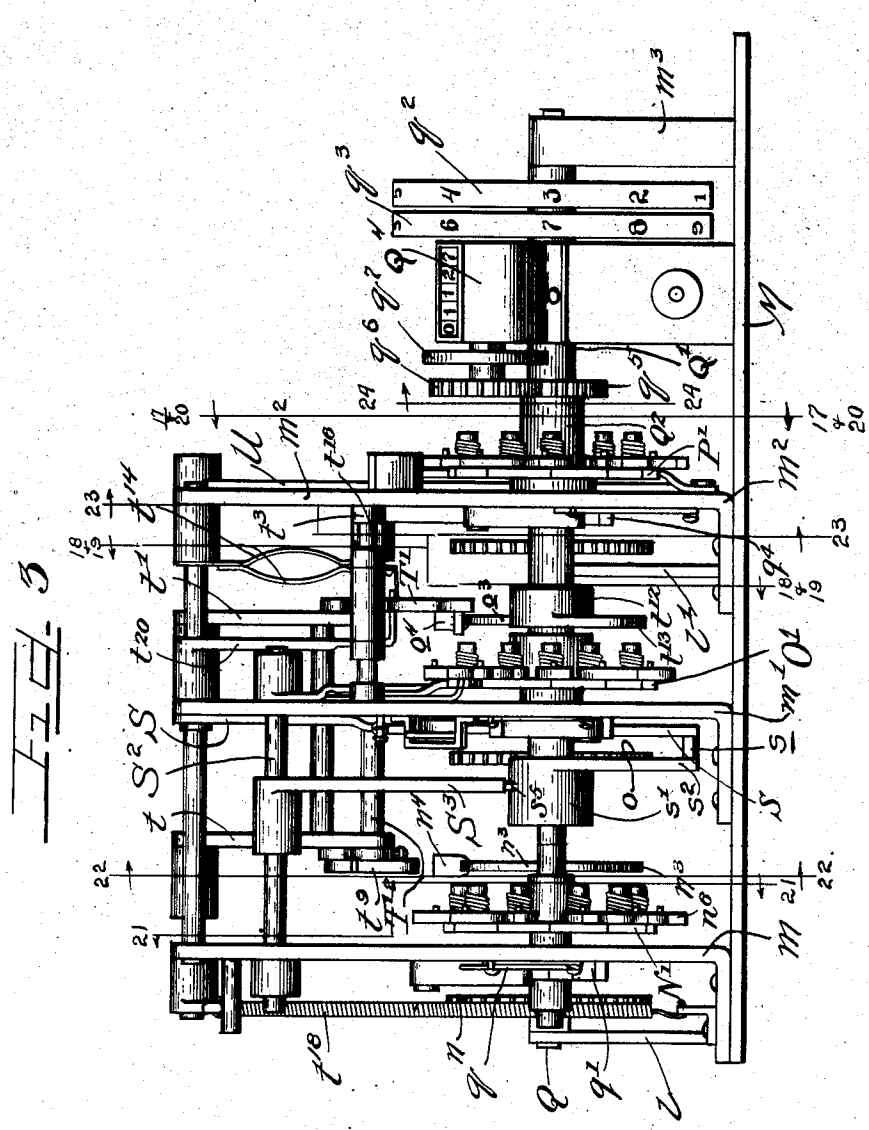
TOTAL ADDING CASH REGISTER.

APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 3.



Witnesses

J. V. Angell

W. C. Hannah

Inventor

Charles Sulfer.

by Charles W. Hills Atty.

C. SULFER.

TOTAL ADDING CASH REGISTER.

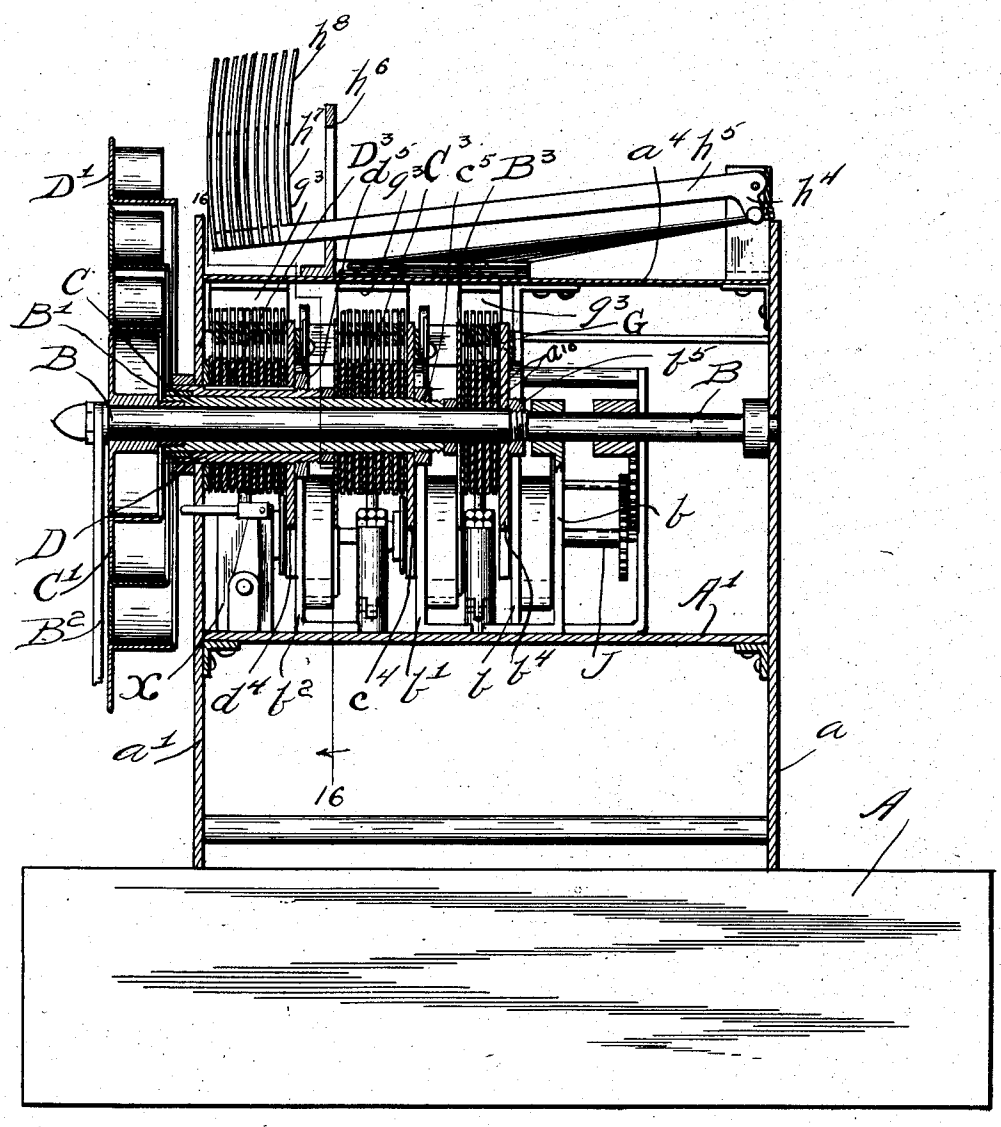
APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 4.

Fig. 4



Witnesses

J. W. Angell.

K. E. Hannah

Inventor

Charles Sulfer.

by Charles W. Vieles Atty.

C. SULFER.

TOTAL ADDING CASH REGISTER.

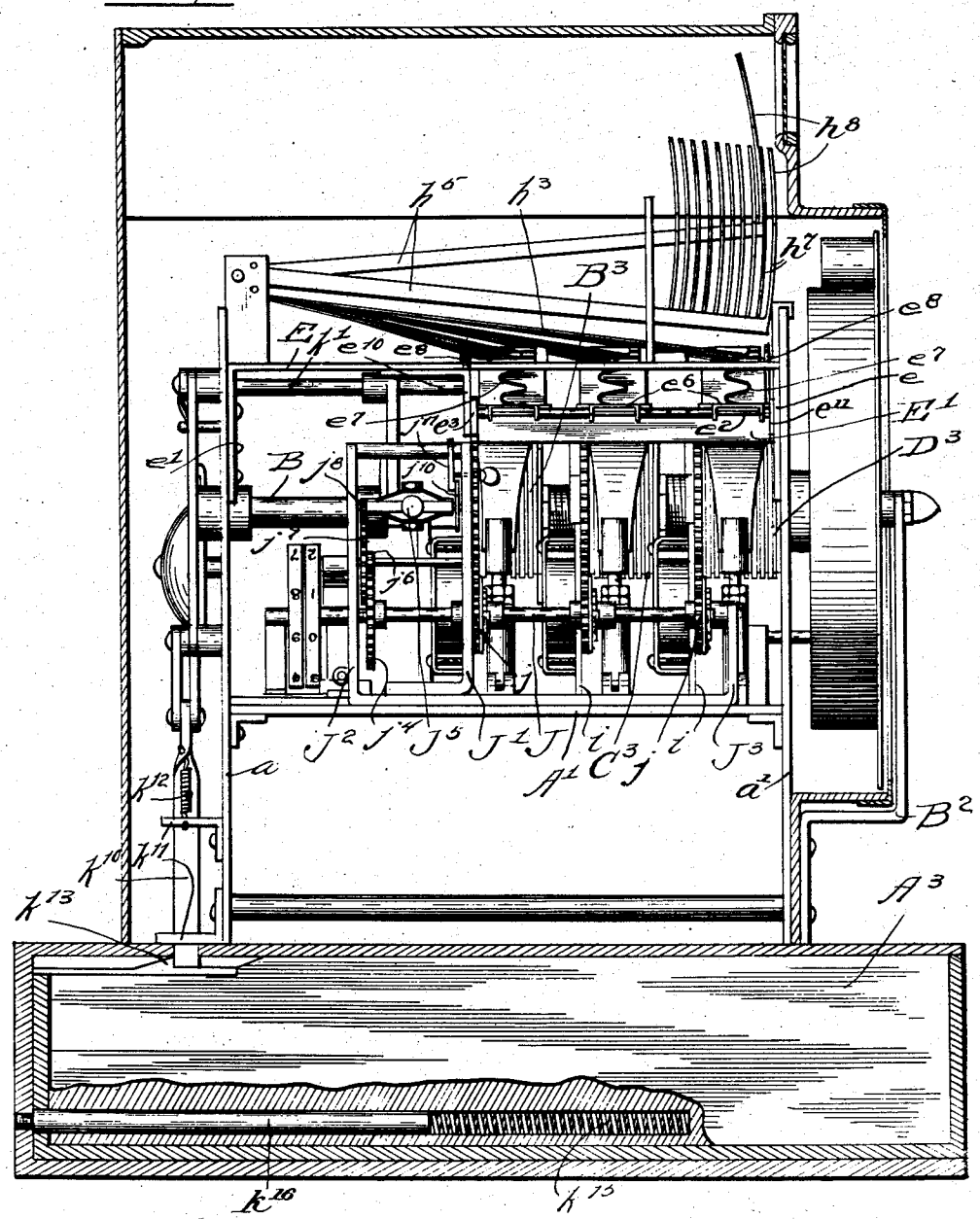
APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 5.

Fig. 5



Witnesses

J. Angell

H. E. Hannah

Inventor

Charles Sulfer.

by Charles W. Seely

C. SULFER.

TOTAL ADDING CASH REGISTER.

APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 6.

Fig. 6

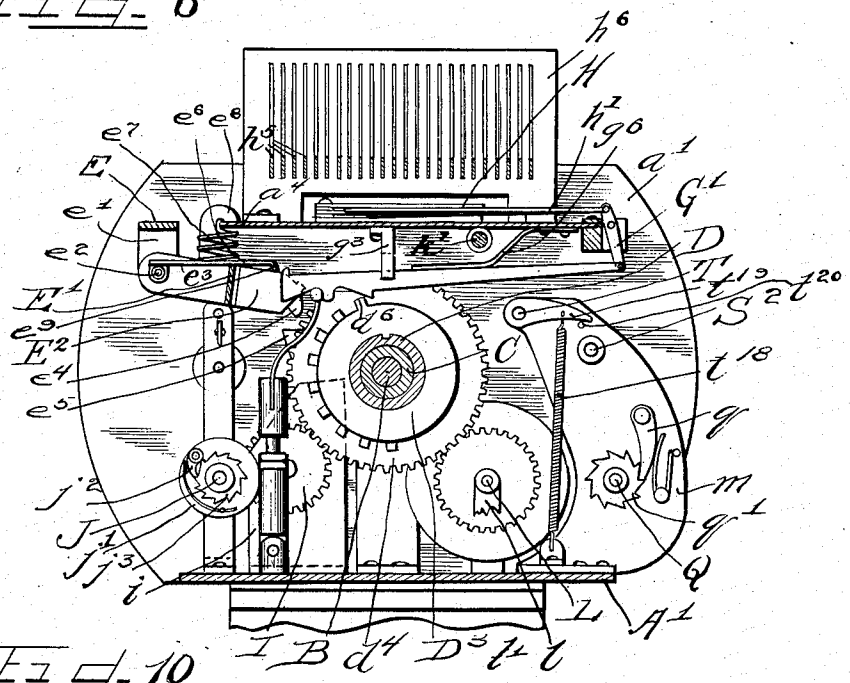
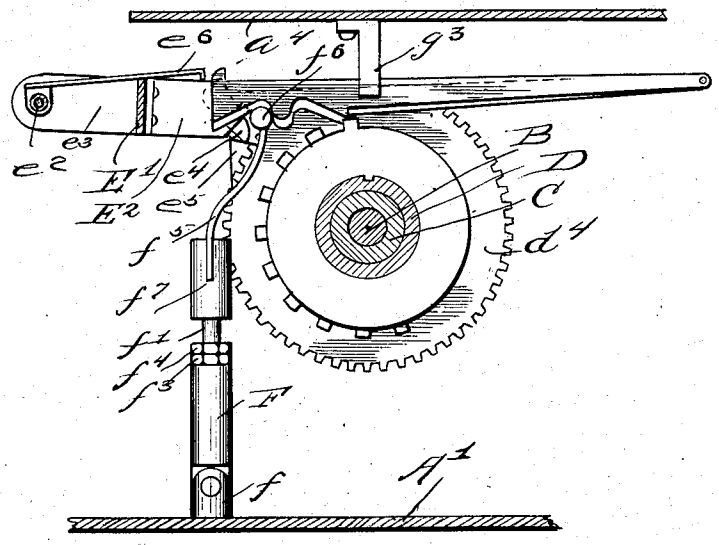


Fig. 10



Witnesses

J. W. Angell.

H. E. Hannah

Inventor

Charles Sulfer.

by Charles W. Nellis Atty.

C. SULFER.

TOTAL ADDING CASH REGISTER.

APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 7.

Fig. 7

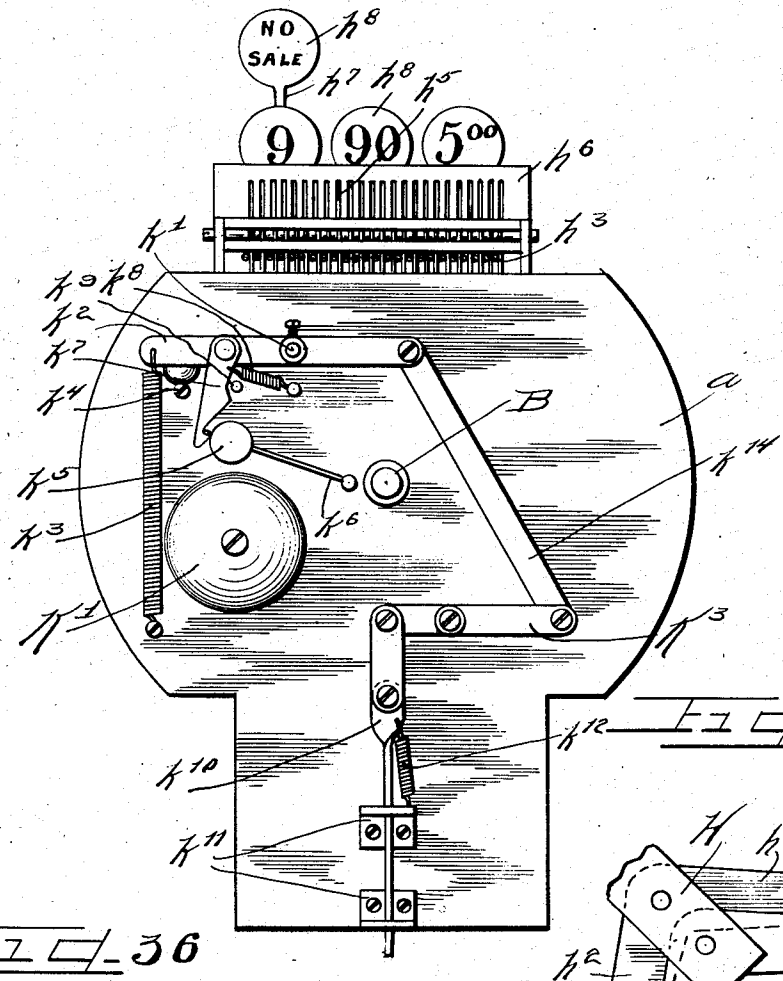


Fig. 32

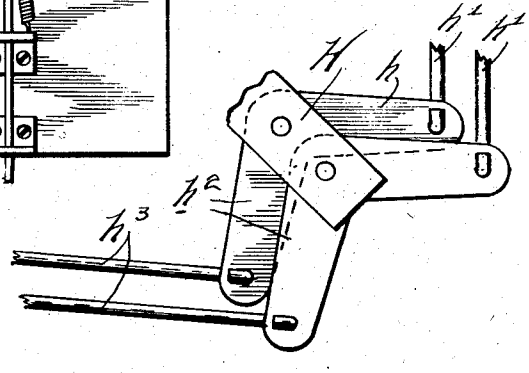
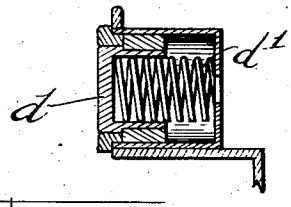


Fig. 36



Witnesses

J. V. Angell

K. E. Hannah

Inventor

Charles Sulfer.

by Charles W. Hills.

Atty.

C. SULFER.

TOTAL ADDING CASH REGISTER.

APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 8.

Fig. 9

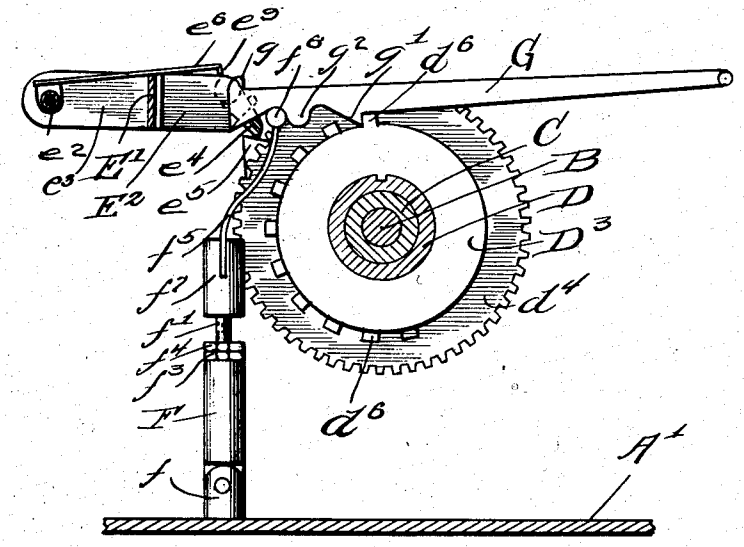
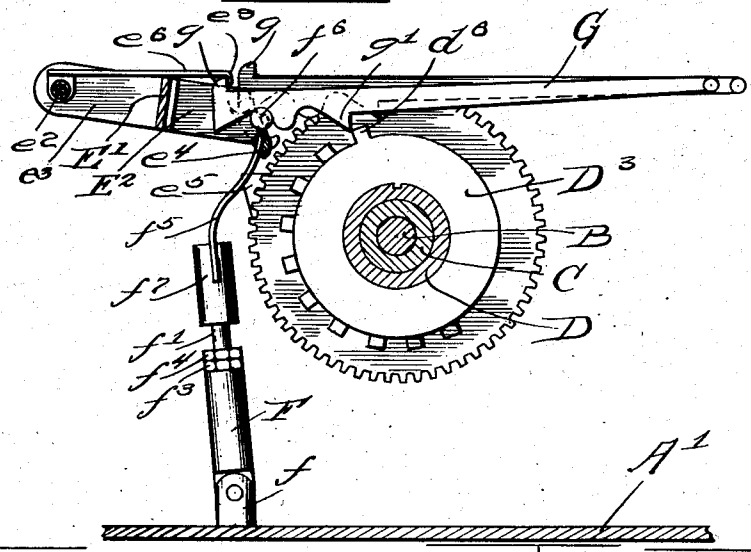


Fig. 8



Witnesses

J. W. Angell.

K. E. Hannah

Inventor

Charles Sulfer.

by Charles W. Hills.

Atty.

C. SULFER.

TOTAL ADDING CASH REGISTER.

APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 9.

Fig. 14

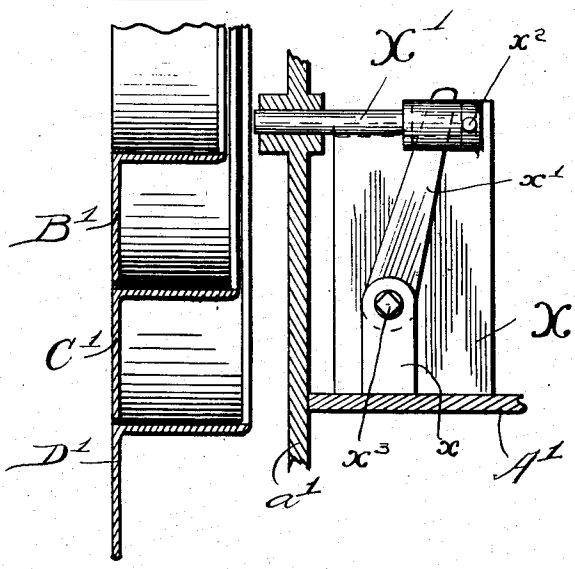


Fig. 15

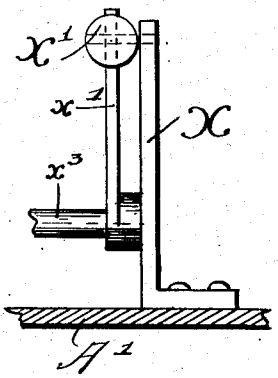


Fig. 13

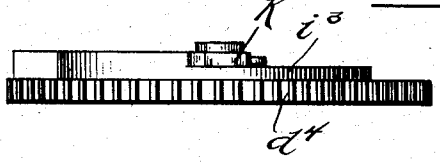


Fig. 11

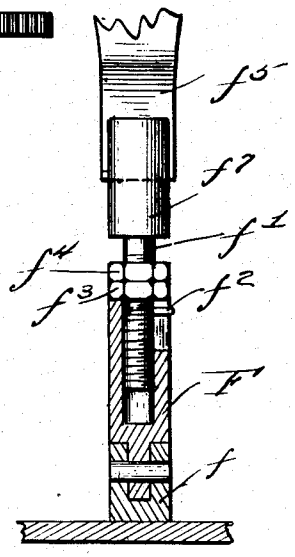
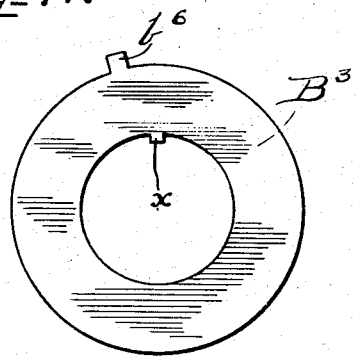


Fig. 12



Witnesses

J. W. Angell.

E. Hannah

Inventor

Charles Sulfer.

by Charles W. Fiss Atty.

C. SULFER.

TOTAL ADDING CASH REGISTER.

APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 10.

Fig. 29

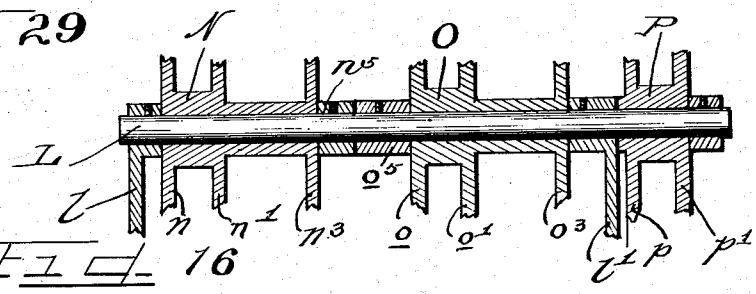


Fig. 16

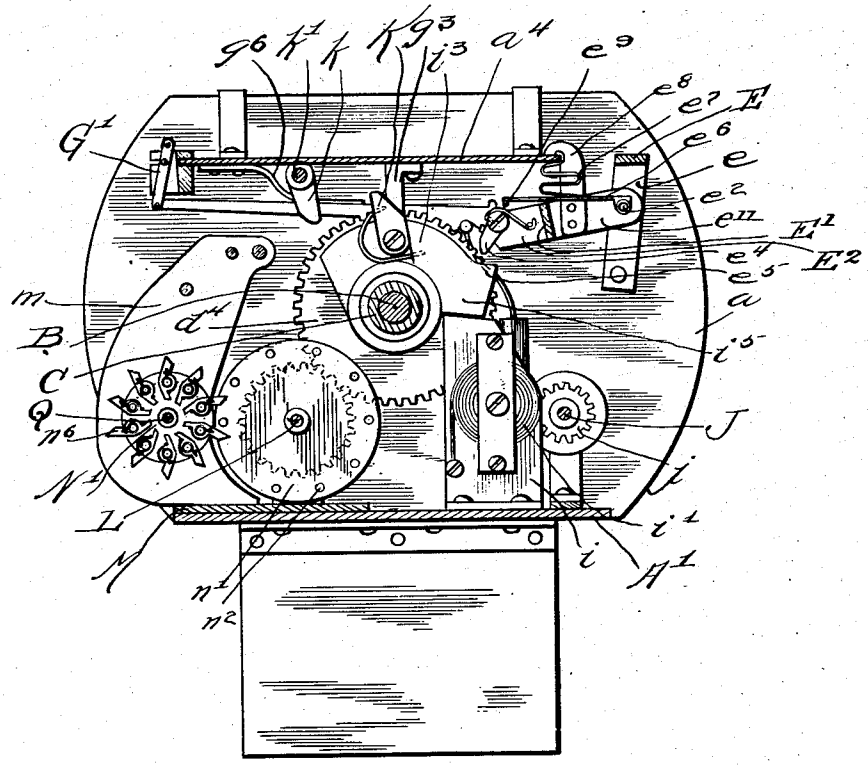
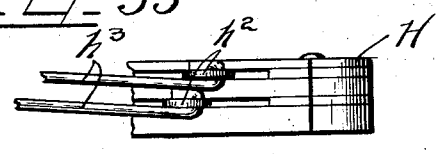


Fig. 33



Witnesses

J. W. Angell.

W. E. Hamuda

Inventor

Charles Sulfer.

by Charles W. Tiers.

Atty.

C. SULFER.

TOTAL ADDING CASH REGISTER.

APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 11.

Fig. 17

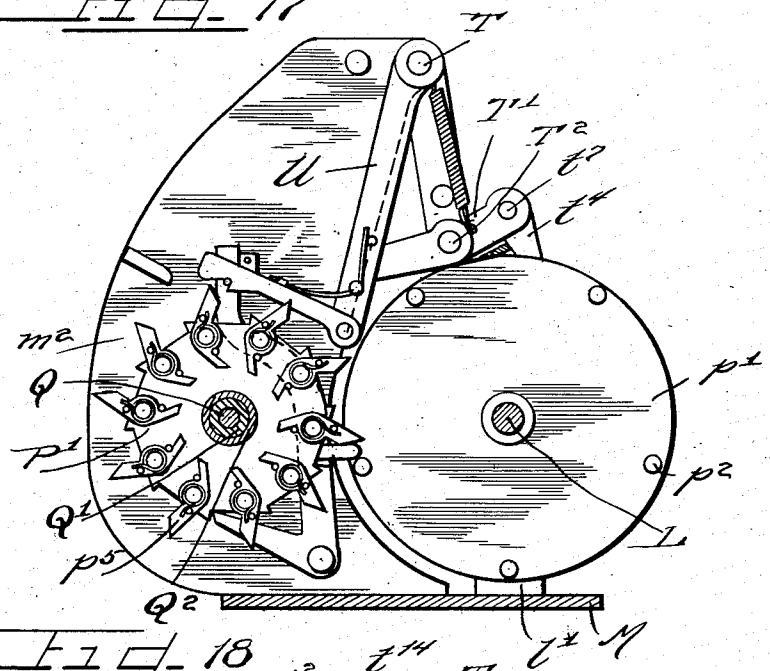
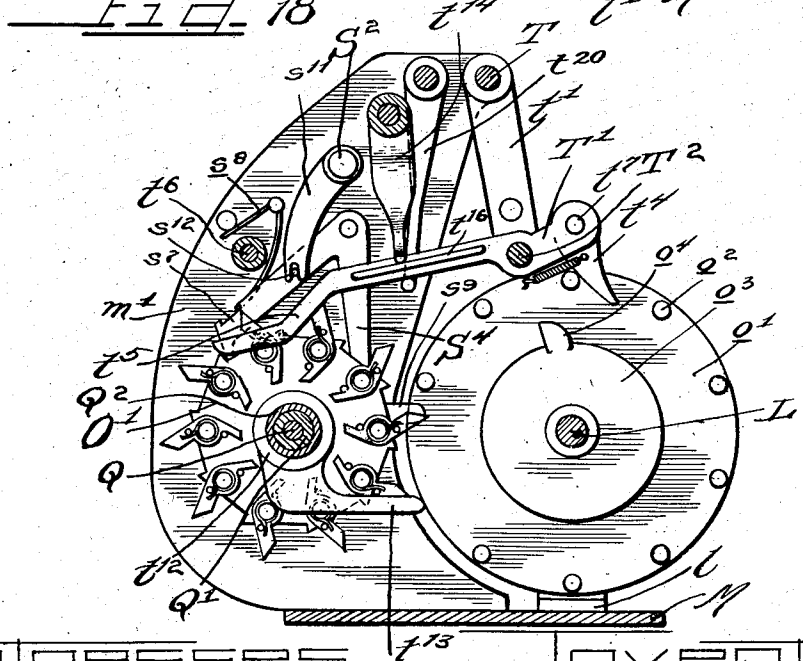


Fig. 18



Witnesses

J. H. Angell.

W. E. Hannah

Inventor

Charles Sulfer.

by Charles W. Hills. Atty.

C. SULFER.

TOTAL ADDING CASH REGISTER.

APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 12.

Fig. 19

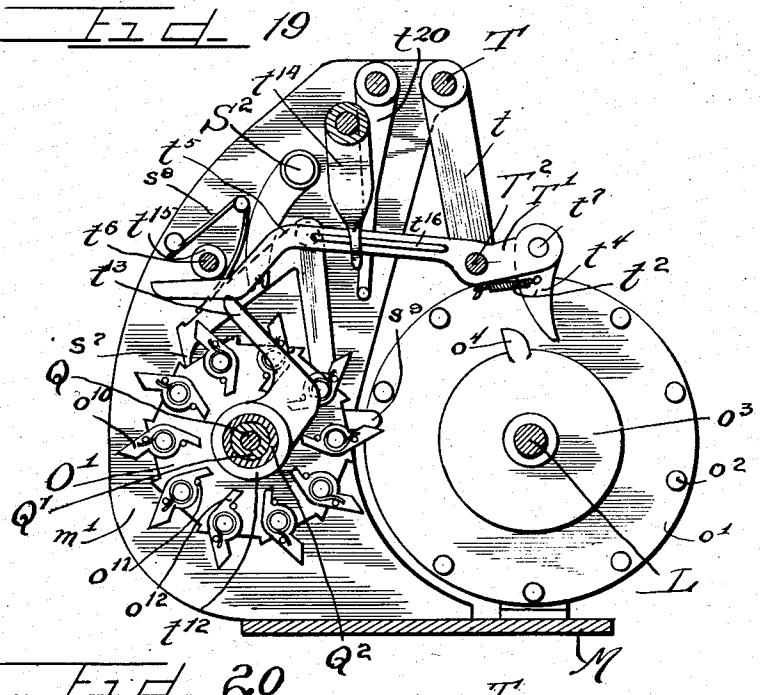
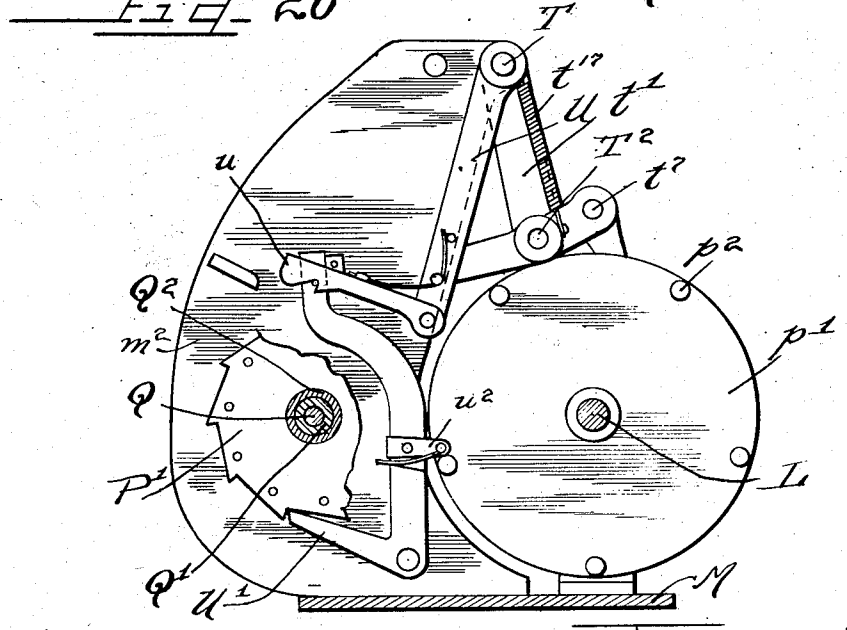


Fig. 20



Witnesses

J. W. Angell.

K. E. Hannah

Inventor

Charles Sulfer

by Charles W. Hill

Atty.

C. SULFER.

TOTAL ADDING CASH REGISTER.

APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 13.

Fig. 21

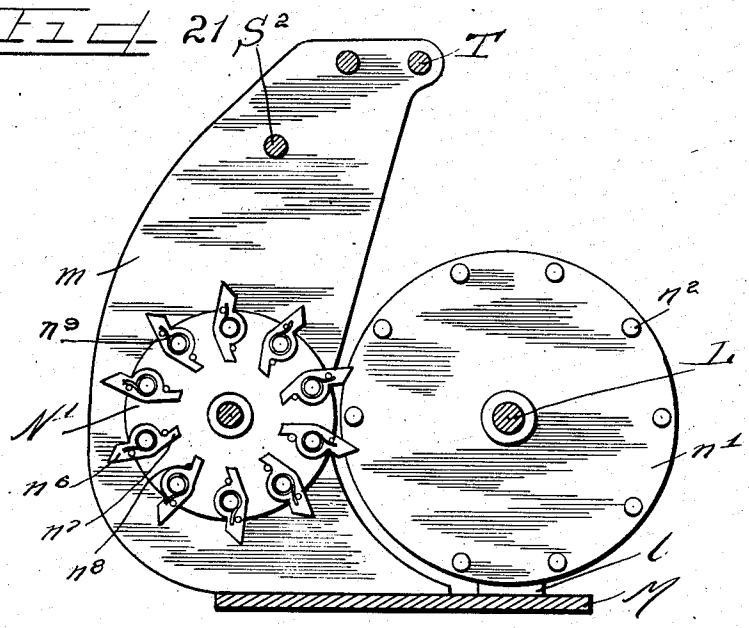
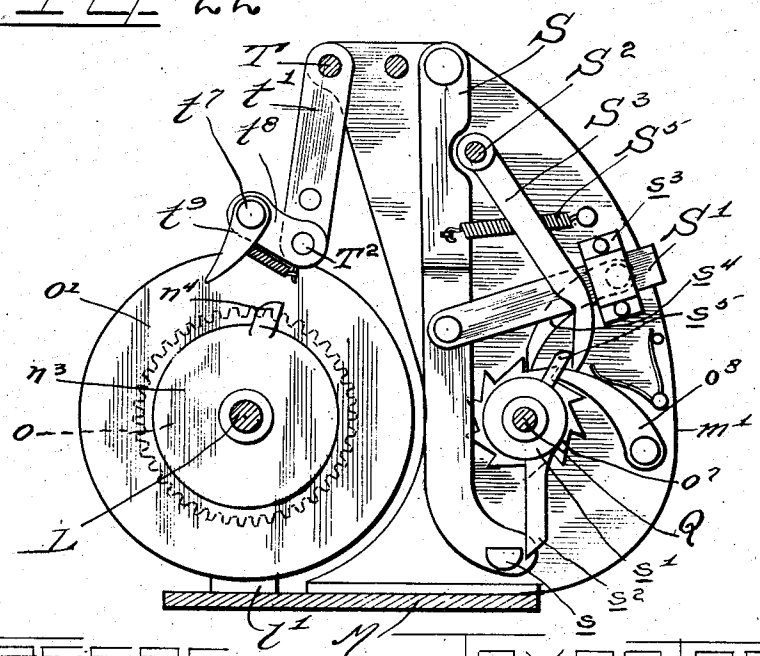


Fig. 22



Witnesses

J. V. Angell.

K. O. Hannah

Inventor

Charles Sulfer.

by Charles W. Hill

Atty.

C. SULFER.

TOTAL ADDING CASH REGISTER.

APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 14.

Fig. 23

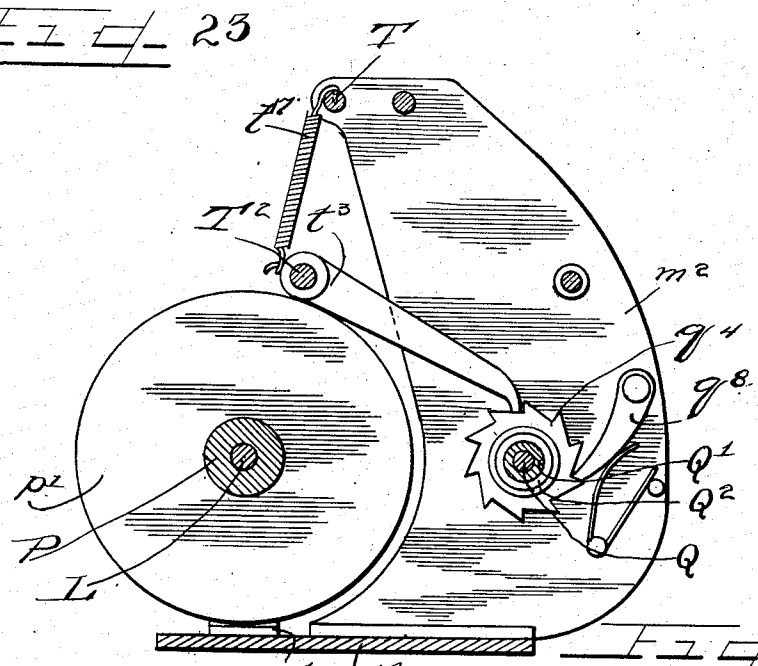
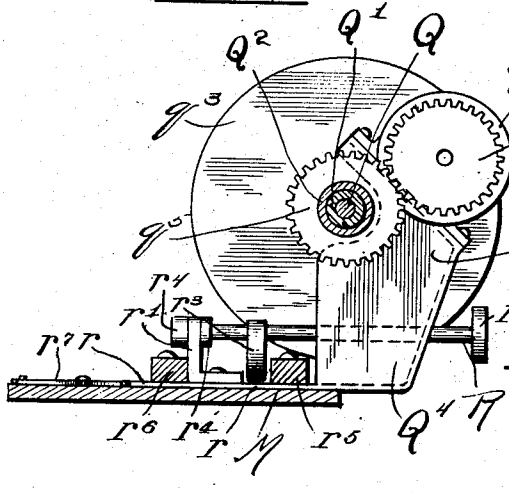


Fig. 25

Fig. 24



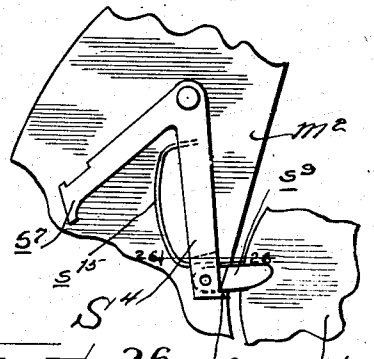
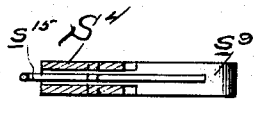


Fig. 26



Witnesses

J. V. Angell.

H. C. Hannah.

Inventor

Charles Sulfer.

by Charles W. Hills

Atty.

C. SULFER.

TOTAL ADDING CASH REGISTER.

APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 15.

Fig. 27

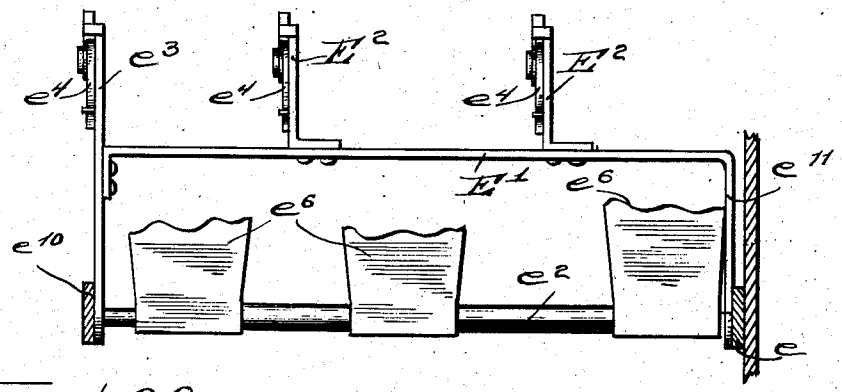


Fig. 28

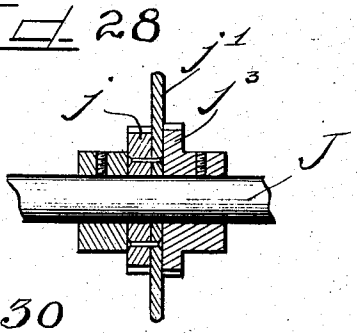
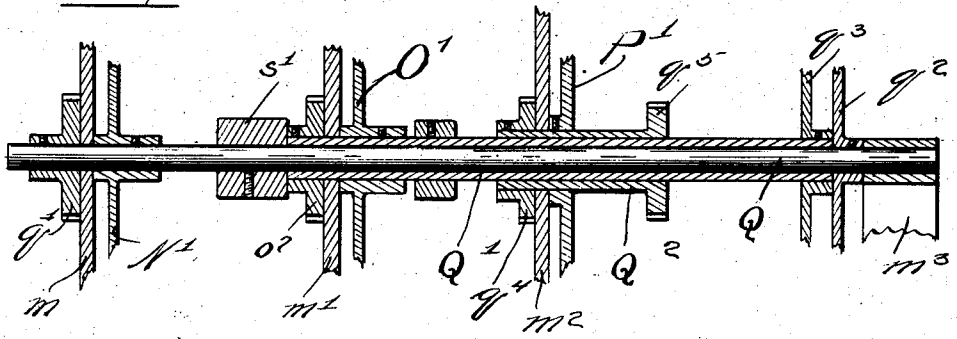


Fig. 30



Witnesses

J. H. Angell.

E. Hannah

Inventor

Charles Sulfer.

by Charles W. Hills Atty.

C. SULFER.

TOTAL ADDING CASH REGISTER.

APPLICATION FILED DEC. 29, 1906.

1,135,551.

Patented Apr. 13, 1915.

16 SHEETS—SHEET 16.

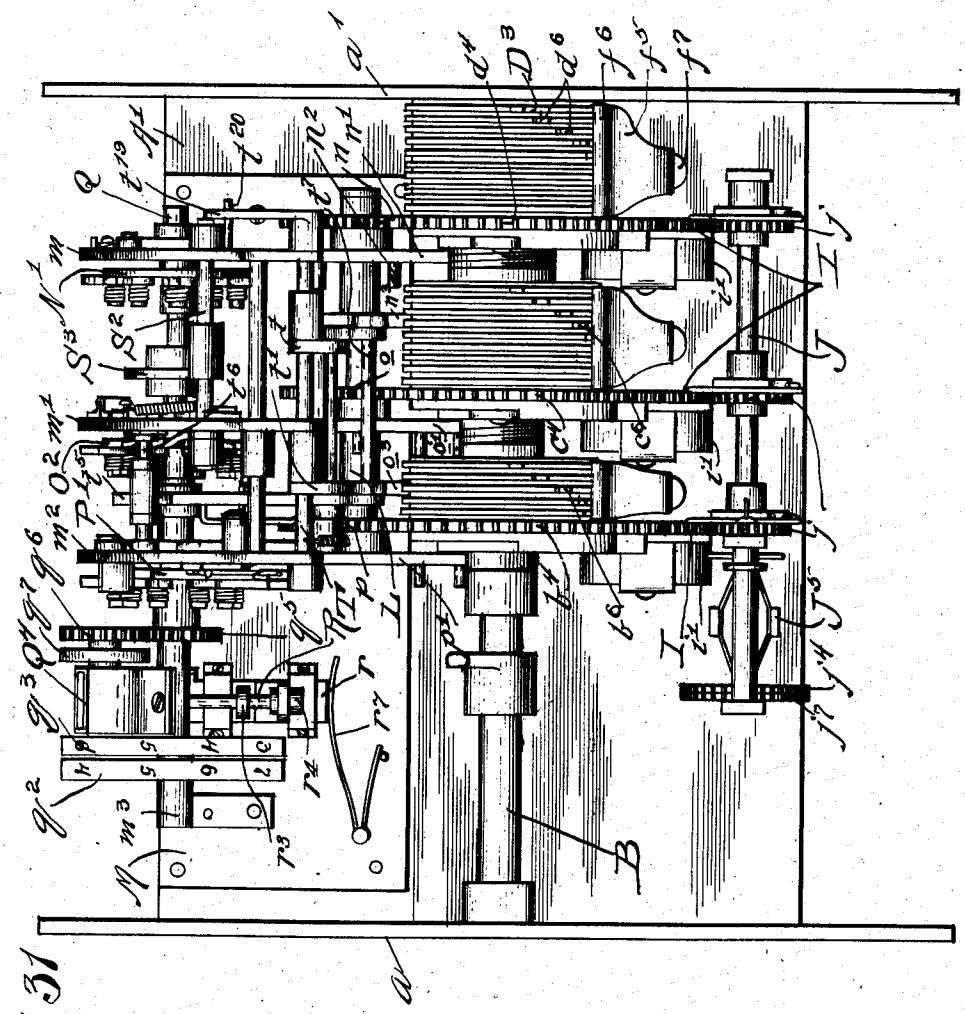


Fig. 31.

Witnesses

J. F. Angell.

R. E. Hamnah

Inventor

Charles Sulfer

by Charles E. Wilson Atty.

UNITED STATES PATENT OFFICE.

CHARLES SULFER, OF CHICAGO, ILLINOIS, ASSIGNOR TO DIAL CASH REGISTER COMPANY, OF MILWAUKEE, WISCONSIN, A CORPORATION OF ARIZONA.

TOTAL-ADDING CASH-REGISTER.

1,135,551. Specification of Letters Patent. Patented Apr. 13, 1915.

Application filed December 29, 1906. Serial No. 350,057.

To all whom it may concern:

Be it known that I, CHARLES SULFER, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Total-Adding Cash-Registers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in cash registers and more particularly to a cash register of that class adapted to be operated without the use of lever keys. Of the many cash registers heretofore devised most have been provided with levers, whereby the operator, by pressing upon the appropriate lever actuates mechanism for recording the amount of the transaction. With all such registers continued use serves to put the register levers or keys out of alinement and it sometimes happens that a dishonest employee may be able to make the machine record incorrectly for that reason, and owing to the use of levers and the multiplicity of parts, it is not uncommon for such registers, when out of order, to record incorrectly at times without the knowledge of the operator, making it impossible to determine with certainty the result of the day's business.

With this in view, the object of this invention is to provide a cash register operated wholly by means of rotary elements and by dials each appropriated to a single denomination of the money to be counted.

It is also an object of the invention to provide in a device of the class described, rotary mechanism for recording the transaction or purchase, and simultaneously exhibiting in a suitable view aperture, a visible signal, and also affording an audible signal.

It is a further object of the invention to afford a cash register, of very cheap, simple and durable construction, indicating all purchases, or transactions, and registering the total sum of all purchases or transactions as they occur, and in which the registering mechanism can be set back to 0 very quickly.

It is an important object of the invention also to afford in connection with mechanism of the class described, a total adding register, which, howsoever the dials are operated, cannot falsify the record, each dial operating independently to insure an accurate count and the dials for lower denominations carrying the count automatically to those of a higher denomination.

The invention embraces many novel features and consists in the matters hereinafter described and more fully pointed out and defined in the appended claims.

In the drawings: Figure 1 is a front elevation of a device embodying my invention. Fig. 2 is a top plan view of the same with the case removed and with parts broken away. Fig. 3 is a side elevation of the registering mechanism with parts omitted. Fig. 4 is a vertical central section taken along the dial shafts. Fig. 5 is a central vertical section of the case showing the mechanism in side elevation. Fig. 6 is a section taken on line 6—6 of Fig. 2. Fig. 7 is a rear elevation with the case removed. Figs. 8, 9 and 10 are details illustrating the operation of a part of the mechanism for actuating the visible signals. Fig. 11 is an enlarged vertical section of one of the pivoted supports for the pawl bars. Fig. 12 is an enlarged detail of one of the toothed wheels or cams. Fig. 13 is an enlarged top plan view of one of the dial shaft gears with the lifting cam and stops thereon. Figs. 14 and 15 are details of the locking means for the dials. Fig. 16 is a section taken on line 16—16 of Fig. 4. Fig. 17 is an enlarged section taken on line 17—17 of Fig. 3. Fig. 18 is an enlarged section taken on line 18—18 of Fig. 3. Figs. 19 to 24 are enlarged sections taken on correspondingly numbered lines on Fig. 3 and illustrate adjustment and operation. Fig. 25 is an additional detail of one of the locking pawls. Fig. 26 is a section on line 26—26 of Fig. 25. Fig. 27 is an enlarged fragmentary plan view of the yoke and springs for supporting the pawl bars when displaying the visible signals. Fig. 28 is an enlarged fragmentary detail of the governor shaft and one of the gears. Fig. 29 is an enlarged fragmentary longitudinal section of the transmission shaft and the mechanism carried thereon. Fig. 30 is a fragmentary longitudinal sectional view of the register shaft and gears. Fig. 31 is a top plan view of the mechanism with the yoke, levers, pawls and other parts for the visible signal omitted. Fig. 32 is an enlarged fragmentary detail of the bell cranks for elevating the visible signals. Fig. 33 is a front eleva-

tion thereof. Figs. 34 and 35 are enlarged details of the arm or lever carrying the visible signal. Fig. 36 is an enlarged detail in section of one of the spring pressed finger pieces set in each dial.

As shown in the drawings: The mechanism is mounted upon a base A and within a removable casing A^2, beneath which is the usual or any suitable money drawer A^3, and is supported within a frame consisting of end plates a and a', which are rigidly secured to the base plate A. Journaled centrally on said end frame members and supported upon suitable bearings, is a shaft B, which protrudes through the front frame plate a', and is provided thereon with a dial B', having marked thereon at equal distances apart and approximately in a semi-circle near its periphery, the numerals and signs $1, $2, $3, $4, and $5, reading from the bottom upward. Of course any desired number of dollars up to and including nine dollars may be indicated thereon. As shown a standard B^2 is supported on the base and affords a support for the end of said shaft B. The shaft B is journaled near its middle portion on an upright or standard b, supported on the base plate A', as shown in Fig. 4. Rotatively mounted on said shaft concentric therewith and extending inwardly thereon, from the front end, is a tubular shaft C, having a dial C' thereon, similar to the dial B', and rotative around the same and marked consecutively on approximately half its periphery to indicate dimes from 10 cents to 90 cents, inclusive, and mounted to rotate on said shaft C, is an outer tubular shaft D, having a dial D', rigidly secured thereon, and marked from 1 to 9 inclusive on a semi-circle to indicate pennies. Said dial is shaped to fit around the dial C', and all the dials are arranged with their faces in the same vertical plane as shown in Figs. 1 and 4. Beneath the numeral 1 on the dial D' and at the same distance therefrom, as the numerals from each other is marked "No sale." As shown said numerals on each dial are marked upon a circular button d secured in suitable sockets in the dials and which are made of cast or pressed metal, or any material suitable for the purpose, and a spring d', shown in Fig. 36, normally holds the other face of said button flush with the face of the dial but permits the same to be pushed inwardly to enable the finger to engage in the socket to rotate the dial.

Rigidly secured on the shafts B, C and D are cams or wheels, such as shown in Fig. 12, and indicated as a whole by B^3, C^3, and D^3, for the respective shafts, these, as shown, are each provided with a single angular tooth b^6—c^6—d^6. The number of said cams on each shaft is the same as the number of stations on its dial, in other words there are ten on the shaft D, nine on the shaft C and five on the shaft B, and these are arranged and rigidly secured so that the teeth on each set are spaced equal distances apart in approximately a semi-circumeference to correspond with the arrangement of the numerals on the dial. Said cams are spaced a slight distance apart on the shaft, by means of a relatively thin plate a^{10} of metal engaged between adjacent cams, as shown in Fig. 4, and which are rigidly secured on their shafts by keys or by a projection suitably positioned with central bore in one of which x is shown in Fig. 12. They are also secured in place by means of nuts d^5—c^5—b^5, threaded on the respective shafts and between which and the cams, on each shaft is rigidly secured a gear wheel b^4—c^4—d^4.

Rigidly secured to the front and rear frame plates a—a' by means of its downwardly bent ends e—e', as shown in Figs. 5, 6 and 16, is a rigid horizontal bar E which is positioned at the left of and above the dial shafts, and a central depending bracket e^{10} is secured at about the middle thereof and, extending through said bracket and the end e of said bar, is a non-rotative shaft e^2. Pivoted on said shaft e^2 between the bracket e^{10} and the end bracket e are inwardly directed arms e^3—e^{11}, which extend to near and above said gears on said dial shafts, and are connected intermediate their ends by a rigid horizontal bar E' on which just at the rear of the gears d^4 and b^4 are secured inwardly directed rigid arms E^2. These are in length equal to the projection of the arm e^3 beyond the bar E' and each is provided with a downwardly directed spring controlled pawl e^4, at its extremity positioned to be engaged by a cam e^5 secured on the rear side of each gear wheel, on each dial shaft, and which acts to lift all said arms simultaneously. Also secured on said shaft e^2, and projecting forwardly over the bar E' are relatively broad leaf springs e^6, the inner edge of each of which is bent downwardly at a right angle for its entire width affording a detent e^9. Said spring plates are held in firm bearing upon the bar E' by means of springs e^7, which bear against the same and beneath a top plate a^4. Rigidly secured on each arm e^3 and e^{11} are upwardly directed inwardly hooked arms e^8, which engages over the plate a^4 at their upper ends and limit the downward movement of the arms, but permit the arms to swing upwardly against the tension of the spring.

Hinged on the base plate A' opposite each set of cam wheels is a standard shown more plainly in Figs. 8 to 11 inclusive. This, as shown, comprises a projection or boss f, rigidly secured to the base plate, and on the top of which is hinged a tubular body F, as

shown in Fig. 11, in which is slidably engaged a cylindric and threaded stem f', held from turning therein by means of a pin f^2, secured in said stem and extending into a longitudinal slot, in said tubular body. Said stem is adjusted as to height by means of a nut f^3, and jam nut f^4, secured on said stem and bearing on said body F, and whereby the stem is supported at an adjusted height on the upper end of said body. The upper end of said stem, as shown, is provided with a head f^7, in which is rigidly engaged an upwardly and inwardly curved blade or plate f^5, having its upper edge f^6, directed horizontally and longitudinally of the machine and rounded to afford a support, and of a length to extend across the face or edge of all the cam wheels in the set opposite which it is secured. Supported at their inner ends on the upper rounded edge f^6 of said hinged supports, are transversely slidable pawl bars G, which equal in number the cams in each set and are positioned respectively directly above each of the cam wheels. Each is provided at its inner extremity with an upwardly directed projection or tooth g, adapted to engage beneath and behind the down turned lip or detent e^9 of the leaf spring e^6. As shown also each is provided near said end on its under side with a notch having downwardly and outwardly inclined sides toward the adjacent end of the bar, and the other side therof affords a somewhat rounded shoulder g^2. Directly above each cam wheel a downwardly extending tooth g' is provided on each pawl bar, adapted to be engaged only by the tooth on the corresponding cam wheel. As shown also said pawl bars betwen the tooth on each, and the shoulder g^2 are cut away to afford an inclined face for engagement by the teeth on the cams as the same are rotated forwardly thereby lifting the ends of the pawl bars. At its opposite end, said pawl bar is pivotally engaged and supported upon a lever G′, the upper end of which projects above the top plate a^4. As shown also a comb g^3, is secured beneath the top plate, and the teeth thereof extends downwardly between the said pawl bars, holding the same positioned each directly above its actuating cam.

Arranged obliquely on the upper side of the top plate as shown in Fig. 2, is a set of bell cranks H, ten in number corresponding with the number of cams on the penny shaft, D, and rods h', connects the forwardly directed arms h, with the upper end of the lever G′, before described. The opposite arm h^2, which is directed transversely the machine, is pivotally engaged by a rod h^3, which leads rearwardly, and is adjustably connected with a downwardly directed arm h^4, of a lever h^5 which is pivotally supported at the rear end of the frame, as shown in Fig. 4. Said levers extend forwardly through a vertical comb h^6, and are each provided at its forward end, with an upwardly directed arm h^7, on the upper end of which is a tablet h^8, which may be as shown of circular or any desired or suitable form and on the front and rear faces of which there is marked or indicated the numeral, sign or other representation or representations contained upon the button of the dial from which said pawl arm is actuated. There are, of course, as many of said levers as there are stations on all the three dials including the "No sale" station. Inasmuch as ten of said levers are appropriated to penny dial, nine to the dime dial and five to the dollar dial, there are also necessarily ten of said bell cranks in the series H, for pennies, nine in the series H′ for dimes and five in the series H^2 for dollars, each of which when actuated by its pawl bar acts to elevate the proper tablet to afford a visible signal in the view aperture A^4, at the top of the case. Inasmuch as the tooth on the cam, corresponding in position with the numeral on the dial it is desired to record, is directly in front of the tooth g' on the pawl bar said teeth on the cams engage and successively lift the pawl bars, against the tension of their springs g^6, shown in Figs. 6 and 16, until the completion of the forward movement or count of the dial. When the dial is released at the end of the forward movement, the tooth d^6—c^6 or b^6 on the cam, corresponding with the count to be represented and which has just passed and is just in advance of the tooth g' on the corresponding pawl bar, immediately engages said tooth g' as the dial returns to its normal position, and said pawl bar is moved lengthwise pushing the hinged support F, therewith and thereby elevating the adjacent ends of the remaining pawl bars, (owing to the inclined surface of the notch in said pawl bars in which the top of the support rests) to a height to let the remaining teeth on said cams pass beneath, without contact. The end of the positively actuated pawl bar passes beneath the spring plate e^6, to be retained, elevating its tablet into view, until a dial is again actuated when the cam e^5 engages the pawl e^4 on the end of one of the arms e^3 or E^2 lifting the same and releasing the pawl bar and permitting the visible signal to fall.

Of course any suitable mechanism may be provided to return the dials and cams to position for the next count. For this purpose, however, gears I, are journaled on a standard i, rigidly secured on the base plate A′, and in mesh with the gears d^4—c^4—b^4 respectively, for each set of cams, and secured to the axle or shaft for each said gear, and to said standards i, are strong coiled springs i', which are wound up by rotation of the

respective dial shafts when actuated by their dials, and act to quickly return the dial actuated to normal when released. As shown in Fig. 16 means are provided to insure the dial always stopping at normal. For this purpose a stop i^5, which may be integral with the cam projection e^5, is rigidly secured on the dial shaft gear b^4—c^4—d^4, and engages the top of the appropriate standard when the dial is at normal. In the same manner the opposite end of said stop or any suitable stops may be provided on said gears to engage the standard i or any suitable rigid part of the machine, to limit the downward movement of the dial when actuated to make its maximum count. As shown, both said stops and the cam projection e^5, are formed from single plates of the proper size and shape rigidly secured on the rear side of each gear. The return movement of the dial, and cams under the action of said springs, is also regulated to prevent pounding or injury to the machine. For this purpose a governor is provided comprising a shaft J, journaled on suitable standards J′—J²—J³, secured on the base plate A′ and gears j are rotatively secured thereon in mesh with the positively driven gears I, for each dial. As shown in Figs. 6 and 28, a disk j', is rigidly secured on each gear j and bearing against the face of said disk is a ratchet j^3, rigidly secured on said shaft J, and which is engaged by a spring controlled pawl j^2, on said disk j', thereby rotating the governor shaft J, as the dial returns to position. On the rear end of said governor shaft J, is secured a gear j^4 which meshes with a pinion j^6, secured on the same shaft with a gear j^7, which in turn meshes with a pinion j^8, which drives a centrifugal governor J⁵, of any suitable kind, and which is provided at one end with a friction brake wheel j^{10}, adapted to be engaged by a shoe j^{11}, as shown in Fig. 5. Said governor is obviously driven on the return movement of the dials when any one or more of the dials are actuated and acts to retard the return movement of the dial to prevent shock due to violent impact of the stops i^5, on the standards i^2, though of course if necessary said governor may be driven when the dials are rotating in either or both directions.

Means are provided for making an audible signal and to unlock the money drawer simultaneously with the actuation of the dial. For this purpose a pivoted spring pressed finger K, is secured on each of the gears b^4—c^4—d^4 and project beyond the periphery thereof sufficiently to engage arms k, secured on a shaft k', which extends longitudinally of the machine beneath the top plate a^4, and through the rear frame plate a as shown in Fig. 7. At the rear side of the end plate a, a bar k^2 is rigidly secured at its middle on the shaft k', and on one end of the same is provided a strong pulling spring k^8, which acts to hold said end firmly down upon a stop k^4. A pad which may be of rubber or other suitable material is secured on the end of said bar to absorb the shock of the return of said bar to normal position after actuation. A bell K′ is secured on said frame plate a, and a hammer k^5, is secured on a spring rod k^6, in position to strike said bell when actuated. As shown also a depending hooked arm k^7 is pivotally engaged on said end of said bar k^2, in position to engage the protruding end of the spring rod k^6, beyond the hammer and lift the same and a spring k^8, is engaged on said arm and acts to hold the same normally inward in position to engage said hammer rod. A stop k^9 is secured on said frame plate to limit the inward swing of said arm k^7, under the action of its spring, and the inner side of the arm is so shaped that when the bar K² returns to normal the hooked end of the arm k^7, swings beneath and engages the hammer so that rotation of said shaft k' acts first to release the hammer, sound the signal on the bell, and as the bar returns to normal engaged the hammer on the arm k^7.

Below the bar k^2 a lever K³ is pivoted in horizontal position and a vertical bolt k^{10}, is pivotally engaged at its upper end on one end thereof. The other end of said bolt extends through suitable slotted plates k^{11} secured on said end frame plate, and downwardly sufficiently to lock the drawer A³. A spring k^{12} is engaged on said bolt and to one of said slotted plates k^{11}, and acts to hold said bolt normally in locking position, or to engage a suitable plate k^{13}, on the drawer, as shown in Fig. 5. The opposite end of said lever K³ is pivotally connected with the end of the lever k^2, by means of a connecting rod k^{14}, so that when any dial is actuated the visible signal is elevated and the shaft k' is rotated to sound the bell and to retract the bolt, to release the drawer and the drawer opens automatically under the action of a spring k^{15}, concealed in the drawer and bearing against a rod k^{16} rigidly engaged at one end to the rear of the casing.

The registering mechanism.—Accurate mechanism for positively registering each transaction and at any time showing the sum of the transactions of the day or a longer period is provided. For this purpose a registering mechanism is secured in the side of the machine opposite the governor upon a removable base plate M, which is bolted or screwed on the base plate A′ and extends for nearly the length of the machine. Secured thereon are uprights or standards m—m' and m^2 which project upwardly and inwardly toward the gears b^4—c^4—d^4 on the dial shafts. Also rigidly secured on said base plate M, are standards

l—l' between the standards m—m' and m^2 and the dial shafts, and rigidly secured therein is a horizontal shaft L, as shown in Figs. 3, 29 and 31. Journaled thereon adjacent the standard l, is a rotatable sleeve N, provided at its end adjacent the standard, with an integral gear n, which meshes with the penny gear d^4, on the dial shaft D. Also integrally secured on said sleeve is a crown gear n' provided with nine teeth spaced 36° apart, to indicate the significant digits on the penny dial and having one vacant space for the "No sale" station on said dial. Said teeth n^2, as shown, comprise rounded pins, set in the face and near the periphery of the gear and projecting toward the rear, as shown in Fig. 21. At the rear end of said sleeve is provided an integral disk n^3, provided on its periphery with an upwardly projecting tooth n^4, the action of which will be later described. At the rear end of said sleeve a collar n^5 is rigidly secured on the shaft L and together with the standard l holds said sleeve always in operative position with the gear n, thereon, in mesh with the penny gear d^4. In the same manner a sleeve O is rotatively secured on said shaft L on the front side of the standard l', and is provided at its forward end with an integral gear o, which meshes with the dime gear c^4, on the dial shaft C. At the rear of gear o is a crown gear o' corresponding in all respects with the crown gear n' before described and provided, as shown, with nine teeth o^2, similar to those thereon. At the rear end of the sleeve is a disk o^3, provided with an upwardly directed tooth o^4 corresponding with the tooth n^4, on the disk n^3, said sleeve is held at all times in operative position with its gear o meshing in the dime gear c^4, by means of a collar o^5 and the standard l' at the ends at each end thereof.

At the rear side of the standard l' is secured a sleeve P, provided with a gear p thereon which meshes with the dollar gear b^4, on the dial shaft B and at the rear end of said sleeve is an integral crown gear p' as shown in Fig. 29, provided with inwardly directed teeth p^2, corresponding in number with the number of stations on the dollar dial B', or as shown five, which are spaced equal distances apart near the periphery of the gear.

Journaled in the standards m—m'—m^2 and a standard or post m^3 at the rear end of the plate M, is a horizontal shaft Q, at approximately the same level with the shaft L, as shown in Figs. 6, 16, 19 and 31, and which is the registering shaft for pennies. Secured on the end of the shaft Q, beyond the standard m is a ratchet q' having its teeth directed upwardly as shown in Figs. 3, 6 and 30 and inwardly, and which are engaged by a spring pressed pawl q secured on the standard m, whereby the shaft Q is held from rotation except that outwardly and downwardly or in other words in the direction of rotation of the penny dial shaft D, in ringing up the transaction. At the rear side of said standard m, and rigidly secured on said shaft Q is a wheel N', as shown in Figs. 3 and 30 having pivoted thereon ten radially and outwardly directed projecting teeth n^6 which extend into position to be engaged by the teeth n^2 of the crown gear n'. As shown more plainly in Fig. 21, said teeth n^6 are each provided with an integral inwardly directed tail n^7, adapted to engage on a pin n^8, positioned adjacent to the pivot to hold said teeth from swinging in their pivot when engaged by the teeth n^2, on the crown gear during the rotation of the dial to make it count, thereby rotating the shaft Q but which swing downwardly on their pivot permitting the teeth n^2 to pass the same, as the dial and crown gear return to normal position. As shown a spring n^9, is secured on each tooth and acts to hold the same normally directed outwardly, in position to be engaged with the teeth of the crown gear. At the rear end of said shaft Q a penny indicating wheel q^2 is rigidly secured. This, as shown, in Fig. 3, is provided on its periphery with the ten digits arranged thereon equal distances apart and increasing in value upwardly on the wheel and inwardly of the machine.

Rotatively secured on the shaft Q is a tubular shaft Q' which extends through the standard m' and m^2 and the rear end of which bears against the penny indicating wheel q^2. Secured on said shaft at the front side of the standard m' is a ratchet wheel o^7 with its teeth directed oppositely from those of the ratchet wheel q', secured on the shaft Q, or in other words secured to rotate the shaft Q' upwardly and inwardly, or on the return movement of the dial C'. Pivoted on the standard m^1 is a spring controlled pawl o^8 which engages said ratchet wheel and acts to hold the shaft Q' from rotation when the dial is moving downwardly in counting. Rigidly secured on said shaft Q' on the rear side of the standard m' is a ratchet wheel O' having its teeth directed toward the direction of the rotation of the shaft in registering and provided with ten outwardly and radially directed teeth o^{10} corresponding in all respects to the teeth n^6 on the wheel N', before described, excepting that said ratchet teeth are free to swing upwardly when engaged by the teeth o^2 of the crown gear o', but are rigidly locked from downward movement on the ratchet wheel O' by means of pins o^{11} set in the face of said wheel and engaged by a tail piece o^{12} on each tooth so that as the dime dial O' returns to normal, rotating the crown gear o' thereby, each of the teeth on said crown gear successively en-

gages one of the pivoted teeth on said ratchet wheel O′, rotating the shaft Q′ to make the count. At the rear end of said shaft and adjacent the penny indicating wheel q^2 is a dime indicating wheel q^3 having marked upon its periphery equal distances apart, the ten digits which inasmuch as the shaft Q′ rotates oppositely from the shaft Q, are arranged oppositely on said wheel from those on the penny indicating wheel, reading from the top downwardly and outwardly.

Mounted to rotate on the tubular shaft Q′, is a tubular shaft Q^2 which projects through the standard m^2 and is provided at its forward end with a ratchet wheel q^4 the teeth of which are directed upwardly and inwardly and a spring pressed pawl q^8 is pivoted on the standard m^2 and engages said gear to hold the shaft from rotation, when the dial is returning to normal position. A ratchet wheel P′ is secured on said shaft, at its rear end, and pivoted thereon, as shown in Fig. 17, are ten pivoted outwardly directed teeth p^5. Said teeth project radially beyond the periphery of the ratchet wheel P′ into position to be engaged by the teeth p^2 on the crown gear p', and are free to swing downward as said crown gear rotates during the return of the dollar dial B′, to normal, but are rigidly held against the upwardly rotation of said gear, as the dial turns downwardly in making the count. Inasmuch as there are ten of said pivoted teeth on said ratchet wheel, each tooth on the crown gear, rotates the shaft Q^2, one tenth of a revolution and in consequence one complete rotation of said shaft indicates ten dollars.

On the inner end of the tubular shaft Q^2 is secured a gear q^5 which meshes with a gear q^6 of equal size, as shown in Fig. 3, secured on the shaft of a Veeder register or any other suitable register Q^4, secured on said base plate M. Secured also on the Veeder shaft back of the gear q^6 is a milled wheel q^7 of slightly greater diameter adapted to be manually engaged to turn the register back to 0. The veeder is slidably secured on the said base plate M, by means of plates r, which slide on the base plate M, as shown in Fig. 24, and on which is secured a bracket r' in which is secured the inner end of a cam shaft R which extends through the base of the veeder and which is provided on its outer end with a milled wheel r^2, whereby the same may be rotated. Said shaft R, is provided near its inner end with a cam r^3, and at its extremity with a collar r^4. When the veeder is pushed inwardly until the standard r' engages the block r^6 and the shaft R rotated, the cam r^3 rigidly engages behind block r^5 which is secured to the base plate M, and thereby rigidly holds the gears q^5 and q^6 in mesh. As shown a spring r^7 is secured on the base plate M, and bears against the end of the slide bars r, and acts when the cams are released to throw the veeder outwardly and the gears out of mesh thereby permitting the register to be reversed or set back.

Obviously the penny register or indicator wheel must rotate continuously with the rotation of the penny dial D′ and the dime wheel must rotate continuously with the dime dial C′ and the veeder will register dollars accurately, when actuated by the dollar dial B′. It is necessary, however, to transfer or carry each ten cents counted on the penny register wheel q^2 to the dime register wheel q^3 and all tens counted on the dime dial or both the penny and dime dials as dollars. In other words each complete rotation of the penny indicator wheel q^2 must produce one tenth of a revolution on the dime wheel q^3, and one complete rotation of the dime register wheel q^3 must count one on the dollar register or veeder.

As shown, and for the purpose of transferring the tens from the penny register to the dime register, a lever S is pivotally supported at its upper end on the standard m', and its lower end, as shown in Fig. 22, extends to near the base plate M and is curved outwardly and provided with a horizontal forwardly directed stud s thereon. Said lever is engaged by a spring S^5 which holds the lower end swung outwardly. Rigidly secured on the shaft Q is a collar s' provided with a radially directed arm s^2, of a length to engage said stud s when said lever is at its proper position in the rotation of the shaft Q, that is to say after nine cents have been indicated on the penny indicator wheel q^2. Pivotally connected in the middle of said lever is a bar S′ which extends outwardly through a suitable support s^3 on the standard m' and a pawl s^4 is pivotally secured on said bar, and engaged to rotate the ratchet o^7 on the shaft Q′ (on which is the dime indicator wheel q^3) when another penny is registered completing the counting of ten cents.

Before the shaft Q′ can rotate however in carrying, the ratchet wheel O′ must be released from its pawl s^7. Journaled near their tops on the standards m—m' is a shaft S^2 and rigidly secured thereon is a depending arm S^3, which is bent inwardly at its extremity, and into position to be engaged by a finger s^5 secured in the collar s' at an angle with the arm s^2, so that said finger engages and lifts the arm S^3, just before the arm s^2 engages the stud s on the lever S. On the other side of the plate m' a bell crank is pivotally supported, one end s^7 of which is shaped to afford a pawl, which is firmly held in engagement with the teeth of said ratchet O′, by means of a spring s^8 as shown in Figs. 18 and 19, the other end S^4, of said bell crank depends between the ratchet

wheel O′ and the standard m' and an inwardly directed finger s^9 is pivotally engaged thereon at its end and is rigidly held from swinging downwardly on said arm by abutting against a shoulder s^6 thereon as shown in Fig. 25 and is held against upward swing by a spring s^{15}. Said finger projects into the path of the teeth o^2 of the crown gear o', slightly above the pivoted teeth o^{10} on said ratchet wheel O′ so that the teeth of the crown gear engage said finger lifting the pawl s^7 just before they engage said pivoted teeth to rotate the ratchet wheel and shaft Q′. Carried on the shaft S^2 is curved arm s^{11} slotted at its lower end, as shown in Figs. 18 and 19, and which engages a pin s^{12}, on the end s^7 of said bell crank so that when the finger s^5 on said collar s' engages the lever S^3 rotating the shaft S^2 it lifts said arm s^{11}, lifts the pawl s^7 and the ratchet wheel O′ is free to rotate the shaft Q′ just before the pawl s^4 is actuated, thereby registering one dime on the register wheel q^3 and turning the penny indicating wheel to 0.

Means are provided for registering one, on the veeder for each ten dimes turned up on the dial C′ or D′ or both conjointly. For this purpose a shaft T is journaled at the top of the standard m—m' and m^2, and depending therefrom intermediate its ends are arms t—t' at the lower end of which is journaled a shaft T^2, the end of which projects from near the standard m to near the standard m^2. Rigidly secured on said shaft T^2 is a bent lever T′ the inwardly directed end of which is provided with a downwardly directed finger t^4 controlled by a spring t^2 secured thereon and on the lever to hold the same with its end directed downward. Said finger may swing inwardly only by extending said spring. The outer end t^5 of said lever, as shown, extends laterally outward, between the standard m' and m^2 and near its extremity curves or is offset downwardly, as shown in Figs. 18 and 19, affording a cam surface. Secured between the standard m' and m^2 is a shaft t^6 which serves as a stop to limit the upward movement of the outer end of said lever T′ and on which is a roller t^{15} to facilitate movement of the lever. As shown a shaft t^7 extends through the inner end of said lever T′ and carries the finger t^4 and is secured at its forward end on a bar t^8 the other end of which is rigidly secured on the shaft T^2. Rigidly secured on the shaft t^7 is a depending finger t^9 as shown in Fig. 22, and which depends into position to be engaged by the finger or tooth n^4 on the disk n^3, of the transmission shaft actuated in registering pennies and the finger t^4 depends as shown in Figs. 18 and 19 into position to be engaged by the finger or tooth o^4 on the disk o^3, for registering dimes. Both are normally supported out of engagement with said teeth, and are capable of being engaged thereby only when the outer end of the lever T′ is elevated, as shown in Fig. 19. Means are provided for elevating said lever T′ comprising a collar t^{12} rigidly secured on the shaft Q′, and on which is provided a curved arm t^{13}, which is so positioned as to lift the outer end of said lever, as shown in Fig. 19, only when the dime registering wheel q^3 indicates nine opposite the veeder or register, in other words when a count of one more on the dime dial, whether made by actuating the penny or dime dial should count the tenth dime or one dollar. When this occurs on the next count the rotation of the shaft Q′ elevates the lever T′ as before described throwing the fingers t^4 and t^9 downwardly into position to be engaged either by actuation of the penny dial or the dime dial. Said lever is supported in said position between coacting springs t^{14}, shown in Figs. 3, 18 and 19, and as shown is provided with a longitudinal rod or wire t^{16} which is secured thereto in any preferred manner to enable said springs to hold the same better against the tension of the spring t^{17}, which acts to throw said lever down and a stop t^{20} is provided to limit the downward movement of the lever and to support the same in normal position as shown in Fig. 18. When the dials are next actuated the finger o^4 or n^4 on the transmission shaft corresponding with said dial engages the finger t^4 or t^9 and carries the lever T′ outwardly thereby rotating the ratchet q^4 and shaft Q^2 by means of the pawl t^3 shown in Fig. 23. The shaft T, is normally held from rotation by means of a pulling spring t^{18}, secured on an arm t^{19}, secured thereon as shown in Fig. 6 and is normally supported on a stop t^{20} set in the standard m. Rigidly secured on the rear end of said shaft T is a depending bar U, as shown in Fig. 20 and pivotally supported thereon is a spring pressed pawl u which engages the upper extremity of a levered pawl U′, which engages the ratchet wheel P′ for the dollar register, and which normally holds the same from movement. As shown, a finger u^2 is pivoted on the lever of said pawl U′ corresponding with the finger s^9 on the lever S^4, and the pawl s^7 serves the same purpose for the crown gear o'. When said shaft T is rotated as heretofore described said arm U swings outwardly releasing the pawl U′ from the ratchet P′ just as the forward swing of the shaft T^2 on the arms t and t' carries the pawl t^3 forwardly to rotate the dollar shaft Q^2. The moment the ratchet has been turned one notch, or one tenth of a revolution of the shaft, the tooth o^4 or n^4 slips past the finger t^4 or t^9 and instantly the spring t^{18} acts to return said shaft T to normal position retracting the lever T′ and the pawl t^3 and returning the pawl U′ into positive engagement with the ratchet wheel P′.

Inasmuch as the dime register acts on the return movement, the forward movement of the dials B′ and D′ in carrying the dime and dollar is accomplished independently of the normal operation of the mechanism in registering dimes and dollars.

Means are provided for locking the dials from movement. For this purpose a standard X is supported on the base plate A′, adjacent the end frame plate a' and pivoted on a foot piece x, secured on the same is an upwardly directed arm x' which at its upper end protrudes through a slot in the end of a bolt X′. Said bolt extends through the frame plate a' and is adapted to engage between the spider arms of the dials adjacent the shafts therefor. A pin x^2 extends through the head of said bolt and engages in a slot in the standard X to keep the bolt from turning, and a shaft x^3 which is rigidly engaged to the arm x' serves as the pivot and by its rotation shoots the bolt or retracts it.

The operation is as follows.—In registering pennies rotation of the dial D′ acts first to rotate the gear d^4 and thence by means of the crown gear n' and wheel N′ having pivoted teeth, which rotates the register shaft Q, to indicate on the penny wheel indicator q^2, opposite the veeder, the amount being indicated as the dial is turned downward. The downward movement of the dial also sounds an audible signal by rotating the shaft k', thereby releasing the hammer k^5 and releasing the drawer A^3 which opens automatically by the action of its spring. When the penny or any dial is released the return movement thereof causes the cam wheel B^3—C^3 or D^3 secured on the corresponding dial shaft to lift all the pawl bars G, with the exception of that corresponding in position with the number to be registered which is engaged by the tooth on the cam wheel and its end carried beneath the spring e^6 which engages the same elevating its visible signal into view at the top of the machine and indicating the amount purchased. In the same manner the dime dial C′ acts to give both signals, opens the drawer and registers on the wheel q^3. When the number indicated on the penny dial is sufficient to make one dime, this is carried to the dime register wheel opposite the veeder. This is accomplished by the arm S^3 being swung forward, releasing the ratchet wheel O′ when the arm s^2 engages the stub s on the lever S thereby actuating the pawl s^4, rotating the dime register shaft one tooth or one tenth of a revolution on the down pull of the dial D′ while all other tens are counted on said registering wheel q^3 during the return movement of the dime dial C′. Should the actuation of the penny dial D′ complete a dollar the action is the same, the rotation of the shaft Q′ however, has brought the bent arm t^{13} beneath and has lifted the lever T′ thereon throwing the finger t^9 down. This is engaged by the tooth n^4, on the disk n^3, retracting the pawls rotating the dime registering wheel to 0 and rotating the shaft Q^2 one tenth of a revolution, thus counting one on the veeder. Should the dime dial C′ be next actuated none of the mechanism for the dollar register or the penny register is actuated, inasmuch as each of the dials is secured on an independent shaft and the register gears are also each on an independent shaft. The count is made upon the return movement of the dial C′. The rotation of the gear c^4 actuates the crown gear o' in turn rotating the shaft Q′ and indicating the same upon the dime register wheel q^3 until nine dimes have been registered. When this occurs the arm t^{13} assumes a position shown in Fig. 19, elevating the lever T′ and throwing the fingers t^4 and t^9 downwardly to be engaged by the tooth o^4 or n^4 with the results heretofore described. When the dial is released the return movement thereof rotating the crown gear o' and disk n^3 carries said levers T′ forwardly releasing the pawl u' for the dollar shaft Q^2 and likewise the pawl s^7 on the dime shaft, and the pawl t^3 engaging the ratchet q^4 and rotates the shaft Q^2 one notch. It is obvious any amounts rung up on the dollar dial B′ will be registered on the veeder independently of any movement of the dime or penny dial C′—D′ or the registering means therefor. The return movement of the dials under the action of the springs therefor is perfectly controlled, at any desired rate of speed by means of the centrifugal governor, and this may be set to vary the tension thus causing a relatively slow or a very quick return just as desired. Of course from the construction described, the dials in each instance return back to neutral position, inasmuch as the stops provided for that purpose on the gears b^4—c^4—d^4 engage on the corresponding standard i.

Very many details of construction may be varied and obviously any equivalent mechanism may be substituted to effect the release of the pawls or to actuate the register shafts or to produce any of the movements hereinbefore described and if preferred the visible signal may be differently actuated than as shown. Inasmuch as I have shown but one construction embodying my invention, I do not purpose limiting the patent to be granted on this application for patent otherwise than necessitated by the prior art as it is evident that variation of details of construction may be almost infinite in number, without departing from the principles of my invention.

I claim as my invention:

1. A machine of the class described embracing a suitable frame, a plurality of

shafts journaled therein, a dial secured on each and appropriated to dollars, dimes and pennies, respectively, and marked on the face with successively arranged significant digits to register the transaction, said dials having their faces in the same vertical plane and normally closed sockets therein to receive the fingers for rotating the dials, and mechanism acting to display as a visible signal, the amount of the transaction when any of said dials are actuated.

2. A machine of the class described embracing a suitable frame, concentrically arranged interfitting dials having their exposed faces approximately flush, each secured on an independent shaft journaled in the frame, and appropriated to dollars, dimes and pennies respectively, and marked on the face with successively arranged significant digits, mechanism acting to display as a visible signal the amount of the transaction, when any of said dials are actuated and a stop for said dials at both limits of movement.

3. A machine of the class described embracing a suitable frame concentrically arranged dials, each secured on an independent shaft journaled in the frame, and appropriated to dollars, dimes and pennies respectively, and marked on the face with successively arranged numerals counting from one to nine, mechanism acting to display as a visible signal, the amount of the transaction, when any of said dials are actuated, a stop for said dials at both limits of movement, and means locking the dials from movement.

4. A machine of the class described embracing a suitable frame, concentrically arranged dials, each secured on an independent shaft journaled in the frame and appropriate to dollars, dimes and pennies, respectively, and marked on the face with successively arranged numerals counting from one to nine, mechanism acting to display as a visible signal the amount of the transaction when any of said dials are actuated, a stop for said dials at both limits of movement, and a sliding bolt locking all said dials from movement.

5. A machine of the class described embracing a suitable frame, concentrically arranged dials having their outer faces in the same plane, each independently journaled in the frame and appropriated to dollars, dimes and pennies, respectively, and marked on the face with successively arranged numerals counting from one to nine, mechanism acting to display as a visible signal, the amount of the transaction when any of said dials are actuated and a rigid stop for said dials at both limits of movement, said numerals being all arranged in a semi-circle on the same side of each dial.

6. A machine of the class described embracing a suitable frame, concentrically arranged dials, each adapted for engagement with the fingers for rotating the same and each independently journaled in the frame and appropriated to dollars, dimes and pennies, respectively, and marked on the face with successively arranged numerals counting from one to nine, mechanism acting to display as a visible signal the amount of the transaction when any of said dials are actuated, a "no sale" signal, a stop for said dials at both limits of movement, one of said dials having a "no sale" station thereon and when actuated therefrom elevating the signal bearing said words.

7. A machine of the class described embracing a suitable frame, concentrically arranged dials, each independently journaled in the frame and appropriated to dollars, dimes and pennies, respectively, and marked on the face with successively arranged numerals counting from one to nine, mechanism acting to display as a visible signal the amount of the transaction when any of said dials are actuated, a stop for said dials at both limits of movement, a "no sale" signal, one of said dials having a "no sale" station thereon and when actuated elevating the signal bearing said words, and a vertical stop affording a bearing for one end of the shaft and limiting the rotation of the dials in counting.

8. A machine of the class described embracing a suitable frame, concentric dials all arranged in the same vertical plane, each independently journaled in the frame and appropriated to dollars, dimes and pennies, respectively, and marked on the face with successively arranged numerals counting from one to nine, visible signals, mechanism acting to display the visible signal for the amount of the transaction when any of said dials are actuated, a stop for said dials at both limits of movement, and means returning said dials to normal after actuation.

9. A machine of the class described embracing a suitable frame, concentrically arranged dials, each independently journaled in the frame and appropriated to dollars, dimes and pennies, respectively, and marked on the face with successively arranged numerals counting from one to nine, visible signals, mechanism acting to display the visible signals for the amount of the transaction when any of said dials are actuated, a stop for said dials at both limits of movement, spring actuated means returning the dials to normal after actuation and means holding the signals in display position after the dials have returned to normal.

10. A machine of the class described embracing a suitable frame, concentrically arranged dials, each independently journaled in the frame and appropriated to dollars, dimes and pennies, respectively, and marked on the face with successively arranged nu-

merals counting from one to nine, mechanism acting to display as a visible signal, the amount of the transaction, when any of said dials are actuated, a stop for said dials at both limits of movement, and a stop affording a bearing for the dial shafts, and limiting the downward rotation of the dials in counting.

11. A machine of the class described embracing a suitable frame, concentrically arranged dials, adapted for engagement with the hand, each independently journaled in the frame and appropriated to dollars, dimes and pennies and marked on the face with successively arranged numerals counting from one to nine upwardly, mechanism acting to display as a visible signal the amount of each transaction when any of said dials are actuated downwardly, said numerals being arranged on a semi-circumference of said dials, and a stop limiting the downward rotation of each dial in counting.

12. A machine of the class described embracing a suitable frame, concentrically arranged dials each independently journaled in the frame and appropriated to dollars, dimes and pennies, respectively, and marked on the face with successively arranged numerals counting upwardly, mechanism acting to display as a visible signal the amount of each transaction when said dials are actuated downwardly, singly or simultaneously, said numerals being arranged near a semi-circumference of each dial, a stop limiting the downward rotation of each dial, and a spring for each dial acting to return the same to normal.

13. A machine of the class described embracing a suitable frame, concentrically arranged dials adapted for simultaneous actuation each independently journaled in the frame, and appropriated to dollars, dimes and pennies and marked on the faces with successively arranged numerals counting from one to nine upwardly, mechanism acting to display as a visible signal the amount of each transaction when one or more of said dials are actuated downwardly, said numerals being arranged near a semi-circumference of each dial, a stop limiting the downward rotation of each dial, a spring for each dial acting to return the dial to normal position after actuation and a stop limiting the return rotation of each dial.

14. A machine of the class described embracing a suitable frame, concentrically arranged dials each independently journaled in the frame and appropriated to dollars, dimes and pennies and marked on the face with successively arranged digits counting upwardly, mechanism acting to display as a visible signal the amount of each transaction when any of said dials are actuated downwardly, said numerals being arranged near a semi-circumference of each dial, a stop limiting the downward rotation of each dial, and a lock to engage any and all said dials from movement.

15. A machine of the class described embracing a suitable frame, concentrically arranged dials each independently journaled in the frame, and appropriated to dollars, dimes and pennies and marked on the face with successively arranged digits counting from one to nine upwardly, mechanism acting to display as a visible signal the amount of each transaction when any of said dials are actuated downwardly, said numerals being arranged near a semi-circumference of each dial, a stop limiting the downward rotation of each dial, a spring for each dial acting to return the same to normal, a lock acting to simultaneously engage all said dials from movement and mechanism for dropping the signals when a dial is next actuated.

16. A machine of the class described embracing a suitable frame, concentrically arranged dials each independently journaled in the frame, and appropriated to dollars, dimes and pennies and marked on the face with successively arranged digits counting from one to nine upwardly, mechanism acting to display as a visible signal the amount of each transaction when one or more of said dials are actuated downwardly, said numerals being arranged on a semi-circumference of each dial, a stop limiting the downward rotation of each dial, a spring for each dial acting to return the dial to normal position after actuation, a stop limiting the return rotation of each dial, and locking means adapted to positively hold all of said dials from movement.

17. A machine of the class described embracing a suitable frame, concentrically arranged dials each secured on an independent shaft journaled in the frame and appropriated to dollars, dimes and pennies and marked on the face with successively arranged numerals counting from one to nine upwardly, mechanism acting to display as a visible signal the amount of each transaction when any of said dials are actuated downwardly, said numerals being arranged on a semi-circumference of each dial, a stop limiting the downward rotation of each dial, each of said dials having recesses to receive the finger and spring pressed stops therein to normally close the same and a numeral marked on each.

18. A machine of the class described embracing a suitable frame, concentrically arranged interfitting dials each independently journaled in the frame and appropriated to dollars, dimes and pennies and marked on the face with successively arranged numerals counting from one to nine upwardly, concentric shafts rigidly connected with the dials, mechanism acting to display as a

visible signal the amount of each transaction when any of said dials are actuated downwardly, said numerals being arranged near a semi-circumference of each dial, a stop limiting the downward rotation of each dial, two of said shafts being tubular and rotatively engaged on the third and each other.

19. In a cash register in combination with rotative mechanism embracing three concentric, interfitting, independently rotative dials, appropriated to dollars, dimes and pennies, rotative mechanism operated by rotation of the dials for registering the amount of the transaction, visible signals, rotative means acting to elevate a visible signal, and a rotative governor to control the rotation of the mechanism.

20. A machine of the class described embracing a suitable frame, three concentrically arranged interfitting dials an independent rotative shaft for each, two of which are tubular and rotative on the other, said dials, appropriated to dollars, dimes and pennies respectively, and marked on the face thereof with successively arranged numerals counting from one to nine on a semi-circle, a "no sale" station on one dial, mechanism acting to display as a visible signal the amount of the transaction when any of said dials are actuated, and rotary mechanism for releasing the visible signal before displayed when any of the dials are next actuated.

21. In a machine of the class described the combination with a suitable frame of shafts journaled therein, a dial secured on each shaft, one indicating dollars, another dimes and the other pennies, a stop secured on the frame and affording an outward bearing for the shafts and limiting the rotation of the dials, mechanism adapted to be operated by each shaft to display a visible signal to indicate the amount of the transaction, a lock adapted to rigidly engage all the dials from movement and a centrifugal governor controlling the rate of rotation of the mechanism.

22. In a machine of the class described the combination with a suitable frame, of shafts journaled therein, a dial secured on each shaft, one indicating dollars, another dimes and the other pennies, a stop secured on the frame and affording an outward bearing for the shafts and limiting the rotation of the dials, mechanism adapted to be operated by each shaft to display a visible signal to indicate the amount of the transaction, a lock adapted to rigidly engage all the dials from movement, a spring acting on each shaft to return the dial to normal after actuation to indicate a transaction and a centrifugal governor controlling the return rotation.

23. In a machine of the class described the combination with a suitable frame of rotative shafts journaled therein, two of which are tubular and journaled on the other, a dial secured on each shaft each interfitting the other to bring the faces flush, and indicating dollars, dimes and pennies, respectively, a vertical stop secured externally on the frame and affording an outer bearing for the shafts, and limiting the rotation of the dials in registering a transaction, mechanism adapted to be operated by each shaft to display and to temporarily support a visible signal indicating the amount of each transaction and stops for the dials at the limit of movement in either direction.

24. In a machine of the class described the combination with a suitable frame of shafts journaled therein, two of which are tubular and journaled on the third, and each other, a dial secured on the outer end of each shaft with their faces in the same plane and indicating dollars, dimes and pennies, respectively, a stop secured on the frame, affording an outer bearing for the shafts and limiting the rotation of the dials in counting, said dials having recesses in the face thereof adapted to receive the finger to rotate the same, mechanism adapted to be operated by each shaft to display and support a visible signal indicating the amount of the transaction and internal stops limiting the movement of the dials to normal and to the maximum count.

25. In a machine of the class described the combination with a suitable frame of shafts some of which are tubular, journaled therein concentrically, a dial secured on each shaft and indicating dollars, dimes and pennies, respectively, and having finger recesses equal distances apart on a semi-circle near the periphery and marked respectively with the nine significant digits, a stop secured on the frame and affording a bearing for the shafts, and limiting the rotation of the dial when actuated by the finger in one of the recesses, visible signals, rotary mechanism adapted to be operated by each shaft to display and to temporarily support a visible signal indicating the amount of each transaction, stops determining the maximum rotation of the dial in either direction and a cam rotative with each shaft and acting to release the visible signal when a dial is next actuated.

26. In a machine of the class described the combination with a suitable frame of three shafts journaled therein, in axial alinement, two of the same being tubular and each tubular shaft journaled on the next inner shaft, a dial secured on each and marked in a semicircle thereon successively with the significant digits, an outer bearing for said shafts affording a stop for the dials when rotated in registering, a spring on each shaft acting to return the dial to normal, visible signals, mechanism actuated by each of said dials to elevate the signal corresponding with the

transaction registered and means releasing said signal when any of said dials are next actuated.

27. In a machine of the class described the combination with a suitable frame of three shafts journaled therein, in axial alinement, two of the same being tubular and journaled on the next lower shaft, a dial secured on each and marked successively in a semi-circle thereon with the significant digits, an outer bearing for said shafts affording a stop for the dials when rotated in registering, a spring on each shaft acting to return the dials to normal, signals, mechanism actuated by each of said dials to elevate a signal corresponding with the transaction registered, means releasing said signal when any of said dials are next actuated, and means on each dial at the digits enabling the dial to be manually engaged.

28. In a cash register three rotatable dials, each having equally spaced recesses in its periphery in a semi-circle thereon, a spring pressed closure for each recess adapated to be forced inwardly by a finger, and marked significant with the significant digits, a bell, tablets, each marked to indicate a different transaction, dials acting to ring said bell and disclose the tablet marked to indicate the contents with each partial rotation of a dial.

29. In a cash register three rotatable dials each having equally spaced recesses in a semi-circle thereon, a spring pressed closure for each adapted to be forced inwardly by the finger and marked successively with the significant digits, visible signals, a money drawer and each dial acting when partly rotated to display one of said visible signals to actuate the audible signal and to open said money drawer automatically.

30. A dial for the purpose specified having arranged around approximately half its circumferences small normally closed sockets to receive the finger of the operator, and spring pressed plates therein adapted to close the sockets and to be retracted by the finger and each marked successively with the significant digits.

31. In a device of the class described a plurality of circular rotative dials one fitting concentrically into the other, and affording peripheral faces in a common plane and each having recesses in its peripheral face arranged equal distances apart for half its circumference, and spring pressed plates therein, each marked successively with the significant digits.

32. In a machine of the class described the combination with a suitable frame of shafts journaled therein, a dial secured on each shaft, normally closed sockets near the circumference of each dial and adapted to receive the fingers to rotate the same, a stop for each limiting its rotation, a spring on each shaft acting to return the dial to normal, signals normally concealed from view, and cams acting to elevate a signal to indicate the transaction during one of the movements of each dial and only released during a subsequent rotation of a dial.

33. In a machine of the class described the combination with a suitable frame, of shafts journaled therein, a dial secured on each and marked successively near its periphery for a semi-circumference with the significant digits, means for manually engaging each dial at each digit to rotate the same in registering, a stop for each dial, a spring acting on each shaft to return the dials to normal, cams on each shaft, bars equal in numbers to the digits on its dial and shifted by the cams during the rotation in registering and mechanism actuated thereby to show an appropriate signal indicating the transaction, a hinged support for the ends of said bars, and mechanism acting to release the signal when a dial is next actuated.

34. In a machine of the class described the combination with a suitable frame of shafts journaled therein, a dial secured on each and marked on the face with the digits spaced equal distances apart, means for engaging each dial manually at each digit, to rotate the same in registering the transaction, a spring and rotative means returning each dial to normal after registering, a tooth on each shaft for each digit on the dial, a pawl bar having a tooth supported above each of said teeth on the shaft, a tablet actuated by each pawl bar and marked to correspond with its digit on the dial, and a detent selectively engaging the proper pawl bar when the dial is actuated and acting to hold the tablet elevated.

35. In a machine of the class described the combination with a suitable frame of shafts journaled therein, a dial secured on each and marked on the face with the digits spaced equal distances apart, means for engaging each dial manually at each digit, to rotate the same in registering the transaction, a spring and rotative mechanism acting to return each dial to normal after registering a tooth on each shaft for each digit on the dial, a toothed pawl bar supported above each of said teeth on the shaft, a tablet actuated by each pawl bar and marked to correspond with its digit on the dial, a detent selectively engaging the proper pawl bar and supporting its tablet when the dial is actuated, and a centrifugal governor regulating the return of the dial when actuated to normal position.

36. In a machine of the class described the combination with a suitable frame of shafts journaled therein, a dial secured on each and marked on the face with the digits spaced equal distances apart, means for en-

gaging each dial manually at each digit to rotate the same in registering the transaction, a spring actuating rotative mechanism for returning each dial to normal after registering, a tooth on each shaft for each digit on the dial, a pawl bar having a tooth supported above each of said teeth on the shaft, a tablet actuated by each pawl bar marked to correspond with its digit on the dial, a detent selectively engaging the proper pawl bar when the dial is actuated, a centrifugal governor regulating the return of the dial actuated, to normal position, an audible signal, a drawer, and means sounding the audible signal and opening said drawer when any dial is rotated.

37. In a machine of the class described the combination with a frame, of a dollar shaft journaled longitudinally therein, a shorter tubular dime shaft journaled on the dollar shaft, a shorter tubular penny shaft journaled on the dime shaft, an outwardly facing dial on each shaft each interfitting the other and marked along its periphery with digits from one to nine or less and adapted to be actuated by engaging at the numeral indicating the amount to be registered, a stop to determine the rotation of the dial in registering, a spring acting on each of said shafts to return the same to normal after registering, teeth on each shaft arranged to correspond with and in number equaling the number of digits marked on the dial, a pawl bar above each tooth, a tooth on each projecting to be engaged by the corresponding tooth on the shaft, a detent to engage the pawl bar last engaged by a tooth shifting the same laterally and a tablet connected therewith marked with the character engaged on the dial and adapted to be exposed to view by movement of the pawl bar.

38. In a machine of the class described the combination with a frame of a penny, a dime and a dollar shaft journaled longitudinally therein, a dial on each shaft and indicating dollars, dimes and pennies, respectively, and marked successively near the periphery on one side thereof with the digits from one to nine or less, a stop affording a bearing for the outer end of said shafts and acting to limit the rotation of the dial in one direction, springs acting on each shaft to return the same to normal after each count, cams on each shaft one for each station of the dial, an appropriate signal actuated by the cam to display the same after each count and mechanism whereby the signal at the beginning of the next count returns to normal.

39. In a machine of the class described the combination with a frame of a dollar shaft journaled longitudinally and centrally therein, a tubular dime shaft journaled thereon and of less length, a shorter tubular penny shaft journaled on the latter, concentric dials, one secured on each shaft and indicating dollars, dimes and pennies, respectively and marked successively near the periphery on one side thereof with the digits from one to nine or less, a stop affording a bearing for the outer end of said shafts and limiting the rotation of the dials downwardly in registering, a spring acting on each of said shafts to return the same to normal after the dial rotates forwardly, a cam on each shaft for each station on its dial, an appropriate visible signal actuated by the cam to indicate the transaction and means dropping said signal prior to showing another when one or more dials are again actuated.

40. In a machine of the class described the combination with a frame of a dollar shaft journaled longitudinally and centrally therein, a shorter tubular dime shaft journaled thereon, a shorter tubular penny shaft journaled on the latter, a dial on each shaft and concentrically arranged and each indicating the denomination of the shaft and marked successively near the periphery on one side thereof with the digits from one to nine or less, a stop affording a bearing for the outer end of said shafts limiting the rotation of the dials in one direction, a spring acting on each of said shafts to return the same to normal, cams or teeth on each shaft one for each station on its dial, a vertically movable signal actuated by the tooth corresponding with the digit counted up, and operative mechanism actuated by one of said teeth or cams to elevate the same.

41. In a machine of the class described rotative shafts appropriated to dollars, dimes and pennies, respectively, concentric dials secured to the shafts marked with significant digits at the points where the same should be engaged to count said digits of the denomination, a visible signal marked with the digit engaged on the dial, mechanism elevating the same by the rotation of the shaft and means releasing the same when the shaft is next actuated.

42. In a machine of the class described the combination with a frame of shafts journaled and appropriated to dollars, to dimes and to pennies, dials marked by the significant digits to indicate the point of engagement for the digit of that denomination, teeth on each shaft corresponding with the stations on its dial, a toothed bar above each tooth, a visible signal marked with the appropriate digit, and connected with each toothed bar, means selectively engaging the appropriate tooth with its bar to elevate the signal when the shaft is actuated, a spring detent acting to support the signal in view position until the shaft is next actuated, and means whereby actuation of any shaft drops the signal previously shown.

43. The combination with a revoluble shaft, of a dial secured thereon, having

digits successively arranged on its periphery, a tooth on the shaft for each number on the dial spaced equal distances apart peripherally and longitudinally of the shaft, a pawl bar for each tooth, a stop to limit the revolution of said dial for each digit, a tablet engaged with each pawl bar and marked with its digit, a hinged support for the edge of said pawl bars adjacent the shaft and adapted to lift all but the pawl bar corresponding with the digit actuated on the dial and a detent adapted to engage said pawl bar and to hold the tablet elevated thereby.

44. The combination with a revoluble shaft of a dial secured thereon having significant digits successively arranged on its face, a stop to determine the rotation of the dial in registering, a tooth on the shaft for each digit on the dial and spaced equal distances apart peripherally and longitudinally the shaft, a pawl bar for each tooth, a tooth thereon adapted to be engaged by its tooth on the shaft, a tablet operatively connected with each pawl bar and bearing a number corresponding with its digit on the dial, a pivoted support adapted to lift all the pawl bars after each actuation of the dial but the one engaged by the tooth corresponding with the digit registered, a spring acting to return the shaft to normal and to move said pawl bar thereby to elevate its tablet into view position, and means supporting said tablet until the next count.

45. The combination with a revoluble shaft of a dial secured thereon having finger grips each marked with a digit successively arranged on its periphery equal distances apart, a tooth on the shaft for each digit on the dial and spaced equal distances apart peripherally and longitudinally the shaft, a pawl bar positioned above and in operative relation to each tooth, a stop to limit the revolution of said dial for each digit, a tablet connected with each pawl bar, and marked to correspond with the digit actuated on the dial, a spring returning the shaft to normal after each count, means lifting all pawl bars except that corresponding with the count, a detent engaging the latter and supporting the tablet thereby in view position, and a cam acting to release said detent when the dial is next actuated.

46. The combination with a revoluble shaft, a dial secured thereon having digits successively arranged on its periphery equal distances apart, means at each digit permitting manual engagement of the dial to rotate the same, a tooth on the shaft for each number on the dial spaced equal distances apart peripherally and longitudinally the shaft, a pawl bar for each tooth, a stop to limit the revolution of said dial for each digit, a tablet connected with each pawl bar and marked with the digits of the corresponding station on the dial, means holding all the pawl bars except that corresponding with the digit actuated, out of engagement with its tooth, and a detent adapted to engage said pawl bar, said pawl bar adapted to elevate the tablet as the shaft turns back to normal.

47. The combination with a revoluble shaft of a dial secured thereon having digits successively arranged on its periphery and having a socket adjacent each digit to receive the finger in actuating the dial, of a tooth on the shaft for each number on the dial spaced equal distances apart peripherally and longitudinally the shaft, a pawl bar positioned above and in operative relation with each tooth, a stop to indicate the revolution of said dial for each digit, a tablet connected with each pawl bar and bearing a number corresponding with the digit therefor, a hinged support for said pawl bars, adjustable in height and adjacent the shaft, a resilient detent adapted after the count to engage the pawl bar corresponding with the digit on the dial actuated and thereby elevating its tablet, and means releasing said pawl bar prior to another count.

48. In a device of the class described a shaft provided with teeth arranged peripherally and longitudinally thereon, a pawl bar above each, means rotating the shaft, a hinged support acting to elevate all but one pawl bar which is engaged by one of said teeth, a detent adapted to engage said latter pawl bar and a cam adapted to release the same when the shaft is next actuated.

49. In a cash register a rotatable shaft, teeth thereon equal in size and arranged peripherally and longitudinally, tablets marked to indicate a transaction, means rotating said shaft and operative mechanism whereby said teeth selectively engage and elevate into view the tablet corresponding with the transaction during the rotation.

50. The combination with a revoluble shaft of a dial secured thereon having sockets each marked with successively arranged digits in its periphery, a tooth on the shaft for each number on the dial, a stop to limit the rotation of the dial, a pawl bar for each tooth, a tablet carried by each pawl bar and marked corresponding thereto in position and means actuating said pawl bars selectively to elevate the tablet to indicate the amount of the transaction.

51. In a cash register a shaft, means for rotating the same in registering, teeth on the shaft arranged equal distances apart peripherally and longitudinally, pawl bars each having a depending tooth and an inclined under surface and arranged one above each tooth on the shaft in position for the pawl bar tooth to be engaged, a hinged support on which the inclined surfaces of

the pawl bars rest and which is pushed laterally elevating the other pawl bars by the first pawl bar engaged, a tooth on the shaft, a spring detent pivoted to engage said actuated pawl bar and a signal actuated by said pawl bar.

52. In a device of the class described the combination with a revoluble shaft of a dial rigidly secured thereon and revoluble therewith and having digits successively arranged on its periphery, a stop to indicate the distance of revolution for each digit in making the count, a tooth on the shaft for each digit on the dial and arranged equal distances apart peripherally and longitudinally, a pawl bar positioned above each tooth and respectively adapted to be engaged by the different teeth on the shaft corresponding with the digit at which the dial is actuated, and each acting when engaged to elevate all the remaining pawl bars above their teeth, a detent adapted to engage said pawl bar, a tablet marked with the digit corresponding with the tooth and supported on said pawl bar to view position while the pawl bar is engaged by the detent, and a cam rotative with the shaft acting to release the pawl bar and dropping the signal when the shaft is next actuated.

53. In a device of the class described a rotative shaft, means rotating the same, a spring acting to return the same to normal position, teeth on the shaft arranged equal distances apart peripherally and longitudinally, a pawl bar above each, a depending tooth on each bar adapted to be engaged to lift the bar when the shaft is rotated in one direction and to be engaged selectively dependent on the distance of rotation when the shaft is returning to normal, said tooth engaged acting to lift all remaining pawl bars above said teeth and a characteristic visible signal actuated by each pawl bar.

54. In a device of the class described the combination with revoluble shafts, of a dial rigidly secured on each and affording means to revolve the same and each having digits successively arranged on its periphery, a stop limit the distance of rotation to register for each digit, a tooth on each shaft for each station on its dial and arranged equal distances apart peripherally and longitudinally of the shaft, a spring acting to return the shaft to normal after each rotation, pawl bars one for each tooth positioned above and transversely each shaft and adapted to be lifted by said teeth when the dial is rotated forwardly, the tooth corresponding with the digit registered engaging and moving its pawl bar transversely the shaft during the return rotation, means actuated by said pawl bar for lifting the remaining pawl bars for said shaft, a detent acting to hold the actuated pawl bar, visible signals, a bell crank lever actuated by said pawl bar to elevate a visible signal corresponding with the digits which the dial actuates and means on each shaft acting to release said detent when any shaft is actuated permitting said signal to fall.

55. The combination with a rotative shaft and a dial thereon marked with successively arranged digits and provided with normally closed sockets adapted to receive the fingers to rotate the shaft of a stop limiting the rotation for each digit, a gear on said shaft and a spring acting to return the shaft to normal after each actuation, a centrifugal governor driven by said gear, a fixed stop on the base and stops secured on the shaft and engaging the fixed stop at each limit of rotation of the dial.

56. The combination with a rotative shaft and a dial thereon marked with successively arranged digits and adapted to be manually engaged at each digit to rotate the shaft, of a stop limiting the rotation for each digit, a gear on said shaft, a spring acting to return the shaft to normal after each actuation, a centrifugal governor driven by said gear, a fixed stop on the base, stops secured on the shaft and engaging the fixed stop at each limit of rotation of the dial, and means actuated from the shaft acting to display a visible signal corresponding with the digit on the dial at which the shaft was actuated.

57. In a device of the class described the combination with rotative dials and horizontally movable pawl bars actuated thereby, of detents adapted to selectively engage a pawl bar actuated by the dial embracing plates having downturned edges extending transversely the ends of the pawl bars and adapted to engage a projection thereon, springs normally holding said plates at the lower limit of their adjustment, a hinged support acting to elevate all the pawl bars from engagement with said detents except that actuated by the dial and a cam also actuated by the dial and acting to release said detent when the next count is made.

58. In a device of the class described the combination with rotative dials of shafts therefor, pawl bars, one for each digit and actuated by the rotation of the dials, detents adapted to engage any of said pawl bars when actuated, embracing plates having downturned edges extending transversely the ends of the pawl bars and adapted to engage a projection thereon, springs normally holding said plates at the lower limit of their movement, a hinged support acting to elevate all the pawl bars from engagement with said detent except that corresponding with the digit from which the dial is actuated, a cam actuated by the dial and acting to release said detent when the next count is made.

59. In a device of the class described the combination with rotative shafts having

each a dial thereon marked with digits, pawl bars one for each digit and actuated by the rotation of the dials, detents adapted to engage any of said pawl bars when actuated, embracing plates having downturned edges extending transversely the ends of the pawl bars and adapted to engage a projection thereon, springs normally holding said plates at the lower limit of their adjustment a hinged support acting to elevate all the pawl bars from engagement with said detent except that corresponding with the digit from which the dial is actuated, a cam actuated by the dial and acting to release said detent when the next count is made, fixed stops on the base, a stop secured on each shaft and acting to limit rotation of each shaft in either direction.

60. In a device of the class described the combination with rotative shafts having each a dial thereon marked with digits, pawl bars one for each digit and actuated by the rotation of the dials, detents adapted to engage any of said pawl bars when actuated, embracing plates having downturned edges extending transversely the ends of the pawl bars and adapted to engage a projection thereon, springs normally holding said plates at the lower limit of their adjustment, a hinged support acting to elevate all the pawl bars from engagement with said detent except that corresponding with the digit from which the dial is actuated, a cam actuated by the dial and acting to release said detent when the next count is made, fixed stops on the base, a stop secured on each shaft and acting to limit rotation of each shaft in either direction, and a governor actuated from any of said shafts and controlling the rate of rotation thereof.

61. In a device of the class described the combination with rotative shafts having each a dial thereon marked with digits, pawl bars one for each digit and actuated by the rotation of the dials, detents adapted to engage any of said pawl bars when actuated, embracing plates having downturned edges extending transversely the ends of the pawl bars and adapted to engage a projection thereon, springs normally holding said plates at the lower limit of their adjustment, a hinged support acting to elevate all the pawl bars from engagement with said detent except that corresponding with the digit from which the dial is actuated, a cam actuated by the dial and acting to release said detent when the next count is made, fixed stops on the base, a stop secured on each shaft and acting to limit rotation of each shaft in either direction, a governor actuated from any of said shafts and controlling the rate of rotation thereof, means affording an audible signal and mechanism affording a visible signal with each rotation of each shaft in one direction.

62. In a device of the class described the combination with rotative shafts, concentrically arranged dials each driven by one of said shafts and each marked with the significant digits successively arranged along a semi-circumference thereof, of a tooth on each shaft for each digit on its dial and spaced equal distances apart both peripherally and longitudinally, a pawl bar positioned above each tooth, a downwardly projecting tooth thereon adjacent its inner end and having an inclined under surface whereby the pawl bars are lifted as the shaft revolves forwardly, an upward projection at the inner end of each pawl bar, a hinged support for the pawl bars of each shaft, detents arranged adjacent the ends of said pawl bars each detent being adapted to engage any of the pawl bars of an entire set, a tablet connected with each pawl bar and marked with a digit corresponding with the digit on the dial for said pawl bar, a spring acting to return each shaft to normal after actuation, a shoulder on each pawl bar bearing against said hinged support whereby engagement during reverse rotation of the dial of a tooth corresponding with the digit from which the dial was actuated, carries the remaining pawl bars out of engagement with the remaining teeth and engages said actuated pawl bar beneath said detent thereby elevating its signal, and a cam acting to release said pawl bar when a dial is next actuated.

63. In a device of the class described the combination with rotative means appropriated to dollars, to dimes and to cents and each marked on its periphery with digits corresponding with the count to be registered, of tablets each corresponding with a digit upon one of the dials, springs acting to return the dials to normal after each actuation, a centrifugal governor controlling the return rotation of each dial, a register, rotative mechanism actuating the register from each shaft, one of the same registering during the return of its shaft to normal.

64. In a device of the class described the combination with rotative dials appropriated to dollars, to dimes and to cents and each marked on its periphery with digits corresponding with the count to be registered, of tablets each corresponding with a digit upon one of the dials, springs acting to return the dials to normal after each actuation, a centrifugal governor controlling the return rotation of each dial, a register, rotative mechanism actuating the register from each shaft, one of the same registering during the return of its shaft to normal, and mechanism whereby ten of a lower denomination on one shaft is carried to the register of a higher denomination normally registered by another shaft.

65. In a device of the class described the combination with rotative dials appropriated to dollars, to dimes and to cents and each marked on its periphery with digits corresponding with the count to be registered, of tablets each corresponding with a digit upon one of the dials, springs acting to return the dials to normal after each actuation, a centrifugal governor controlling the return rotation of each dial, a register, rotative mechanism actuating the register from each shaft, one of the same registering during the return of its shaft to normal, and mechanism whereby ten of a lower denomination on one shaft is carried to the register of a higher denomination normally registered by another shaft, said carrying being accomplished during the opposite rotation of the higher denomination shaft from that in which it normally registers.

66. In a device of the class described the combination with rotative shafts appropriated to dollars, to dimes and to cents, of a dial on each marked on its periphery with significant digits, teeth on each shaft one for each digit on the dial, pawl bars one above each tooth, a tablet marked with the appropriate dial digit on each pawl bar, means whereby said teeth selectively engage the pawl bar for the digit from which the dial is actuated thereby exposing its total, a spring acting to return the dial to normal after each actuation, a governor controlling the return, registers for dollars, dimes and cents each driven from the corresponding shaft and mechanism whereby ten of one register its transferred to a higher register.

67. In a device of the class described the combination with rotative shafts appropriated to dollars, to dimes and to cents, of a dial on each marked on its periphery with significant digits, teeth on each shaft one for each digit on the dial, pawl bars one above each tooth, a tablet marked with the appropriate dial digits on each pawl bar means whereby said teeth selectively engage the pawl bar, for the digit from which the dial is actuated thereby exposing its total, a spring acting to return the dial to normal after each actuation, a governor controlling the return, registers for dollars, dimes and cents each driven from the corresponding shaft and mechanism whereby ten of one register is transferred to a higher register, one of said registers acting during the reverse rotation of its dial shaft.

68. In a device of the class described the combination with axially alined rotative shafts appropriated to dollars, dimes and cents and two of which are tubular and the inner shaft affording a bearing for the next outer shaft, of a dial secured on each shaft and marked on its periphery with digits corresponding with the amounts to be registered, teeth on each shaft arranged longitudinally thereof one for each station on the dial, pawl bars arranged one above each tooth, a tablet connected with each and marked with a digit corresponding with the digit for that pawl bar on the dial, means whereby said teeth selectively engage the pawl bar for the dial digit actuated thereby elevating its tablet, means releasing the pawl bar to drop the signal when any shaft is next actuated, a register for each denomination, rotative mechanism driven from each shaft whereby each may register independently and mechanism whereby said shafts may all register simultaneously and whereby ten of one denomination is carried to a higher.

69. The combination with a plurality of independently registering dials, finger apertures in said dials, yielding means normally closing said apertures, a rotative shaft for each dial, a gear on each shaft, a plurality of registers, mechanism for each dial adapted to act singly or simultaneously to register the count on the respective register, mechanism operated conjointly by said shafts whereby each ten of a lower denomination is registered as one on the next higher register.

70. The combination with a plurality of dials, a rotative shaft for each, a gear on each shaft, concentric shafts extending longitudinally of the dial shafts, independent registering mechanism on said shafts, one for each dial adapted to act singly or simultaneously to register the count, mechanism operated conjointly by said shafts whereby each ten of a lower denomination is registered as one on the next higher register, and a governor connected with all the dial shafts for controlling the rotation of the dials in one direction.

71. The combination with a plurality of dials appropriated to different money denominations, a rotative shaft for each, a gear on each shaft, independent registering mechanisms appropriated to the different denominations of the dials and each dial adapted to act singly or simultaneously, mechanism operated conjointly by said shafts whereby each ten of a lower denomination is registered as one on the next higher register, mechanism for transferring to the highest denomination registering mechanism a count when the total sum of all the lower denomination registering mechanism equals a count for said highest denomination registering mechanism, a governor adapted to be driven by any of said gears on said shafts and controlling the rotation of the dials and means returning the dials to normal after actuation.

72. A cash register embracing in combination independent rotative registering means for pennies, for dimes and for dollars, an independent shaft for each, said shafts concentric, rotative mechanism for registering the

count and actuating said registers, mechanism whereby ten of any lower denomination is carried to the next higher, concentric dials one dial for each register adapted when actuated to actuate the rotative mechanism and means returning the dials to normal position after each count is registered.

73. The combination with rotative shafts appropriated to dollars, dimes and to cents, respectively, of a dial on each marked peripherally with the significant digits, a spring on each shaft acting to return the same to normal when actuated, a gear on each shaft, a governor common to all the shafts and driven by said gears, rotative registering means for pennies, for dimes and for dollars driven by the respective gears on said shafts, pawls holding said registers normally from movement, means capable of actuating the penny shaft and the dime shaft to release the pawl on the dime register and the dollar register in carrying ten of a lower denomination to a next higher and a pushing pawl actuated by the penny and by the dime shaft independently or conjointly to rotate the dime and the dollar register independently of the normal means for actuating the same.

74. The combination with rotative shafts appropriated to dollars, dimes and to cents, respectively, of a dial on each marked peripherally with the significant digits, a spring on each shaft acting to return the same to normal when actuated, a gear on each shaft, a governor common to all the shafts and driven by said gears, rotative registering means for pennies, for dimes and for dollars driven by the respective gears on said shafts, pawls holding said registers normally from movement, means capable of actuating the penny shaft and the dime shaft to release the pawl on the dime register and the dollar register in carrying ten of a lower denomination to a next higher, a pushing pawl actuated by the penny and by the dime shaft independently or conjointly to rotate the dime and the dollar register independently of the normal means for actuating the same, and a sliding support for one of the registers whereby the same may be thrown out of mesh to return back.

75. The combination with the rotative dial shafts, the mechanism affording a visible signal, an audible signal and for returning the shafts to normal, of a gear on each shaft, registering mechanism for each dial shaft and driven by the respective gears on said shafts to register cents, dimes and dollars, independently, independent dollar, dime and penny register shafts, a ratchet on the dime register shaft, a levered pawl to engage the same, an arm secured on the cents register shaft and engaging said lever after nine cents have been registered whereby ten of said lower denomination is carried to a next higher and acting to shift the dime register one with the next movement of the penny register shaft.

76. The combination with the rotative dial shafts, the mechanism affording a visible signal, an audible signal and for returning the shafts to normal, of a gear on each shaft, registering mechanism for each dial shaft and driven by the respective gears on said shafts to register cents, dimes and dollars, independently, a ratchet on the dime register shaft, a levered pawl to engage the same, an arm secured on the cents register shaft and engaging said lever after nine cents have been registered whereby ten of said lower denomination is carried to a next higher and acting to shift the dime register one with the next movement of the penny register shaft, and pawls engaging suitable ratchets on said registering shafts to prevent movements.

77. The combination with the rotative dial shafts, the mechanism affording a visible signal, an audible signal and for returning the shafts to normal, of a gear on each shaft, registering mechanism for each dial shaft and driven by the respective gears on said shaft to register cents, dimes and dollars, independently, concentric dollar, dime and cent register shafts, a ratchet on the dime register shaft, a levered pawl to engage the same, an arm secured on the cents register shaft and engaging said lever after nine cents have been registered whereby ten of said lower denomination is carried to a next higher and acting to shift the dime register one with the next movement of the penny register shaft, and gears on said registering shafts having pivoted teeth and driven from the gears on said dial shafts and actuated only when said dials rotate in one direction.

78. In a device of the class described the combination with the axially alined rotative dime, penny and dollar shafts, two of which are journaled on the other, and a dial on each marked with the significant digits, of an audible signal, a visible signal, a money drawer, mechanism sounding said audible signal and actuating a visible signal to view positions corresponding with the amount to be registered and for releasing said money drawer when any dial is actuated, an independent register for each dial, a shaft for each in axial alinement, the dime register shaft and the dollar register shaft being journaled on the penny register shaft and on the dime register shaft respectively, mechanism actuated from the penny dial shaft and the dime dial shaft acting on two of said register shafts simultaneously to transfer ten of a lower denomination to the next higher register and a lock for the dials.

79. In a device of the class described the

combination with the axially alined rotative penny, dime and dollar shaft, two of which are journaled on the other, and a dial on each marked with the significant digits, of an audible signal, a visible signal, a money drawer, mechanism sounding the audible signal and operating a visible signal corresponding with the amount to be registered and for releasing the money drawer when any dial is actuated, an independent register for each dial, a shaft for each in axial alinement, the dime register shaft and the dollar register shaft being journaled on the penny register shaft and on the dime register shaft respectively, mechanism actuated from the penny dial shaft and the dime dial shaft acting on two of said register shafts simultaneously to transfer ten of a lower denomination to the next higher register, a gear on each register shaft having pivoted teeth capable of turning the same in but one direction, crown gears driven from the dial shafts actuating the same, means operated from the lower denomination register shaft for rotating the gear on the higher denomination shaft to carry tens.

80. In a cash register of the class described a plurality of concentric interfitting dials each comprising a plate having digits marked therein increasing from one successively upwardly and spaced equal distances apart around the periphery, each of said dials having sockets for the fingers, means normally closing the same and resisting insertion of the fingers thereinto and a hub connected to and offset from said dials for engagement to a shaft.

81. Dials for the purpose specified each comprising a circular plate, a rearwardly directed flange integral with each and the flange increasing in width on each successive outer dial, said dials arranged concentrically, having all of the plates on the same plane and recesses in each plate, means normally and automatically closing the recesses and adapted to be retracted to permit engagement at the recess, digits marked at the recesses, a spider connected to the flange of each dial and means connecting the spider to a shaft.

82. In a device of the class described the combination with concentric interfitting actuating dials marked with the significant digits, an independent shaft for each dial, projections engaged on each shaft corresponding in manner with the number of digits on its dial, a set of signals for each dial corresponding with the number of digits on the dial and normally concealed, and means actuated by the projections to move the proper signal to view position.

83. In a device of the class described the combination with rotatable, concentric interfitting dials each having digits marked on the face thereof, a shaft engaged to each, a plurality of simultaneously movable elements on each shaft one appropriated to each digit on the face of the dial, a set of signal tablets for each dial and each appropriated to a different numeral, and marked corresponding, and means operatively connected with the tablets adapted to be actuated by the rotatable elements appropriated to the count to move the signal to view position.

84. In a device of the class described the combination with plurality of shafts, concentric dials secured thereto, each having digits marked thereon, a set of cams for each dial and simultaneously movable therewith, a set of tablets for each dial and each tablet appropriated to a different numeral on the respective dial, means pivotally connected at one end with the tablets and having its outer end free and positioned adjacent the cams, one of said cams adapted when its dial is operated to actuate said pivotal means to elevate to view position the tablet having the digit marked thereon corresponding to the digit counted on the dial.

85. In a device of the class described the combination with concentric interfitting actuating dials each marked with successively increasing numerals and the numerals on one dial representing different denominations from the other dials, said dials adapted for simultaneous operation, an independent shaft for each dial, a set of signals for each dial and the signals for each set marked successively with a numeral to correspond with the numerals on that dial, means moving to view position the signal bearing the numeral corresponding to the numeral counted on the dial, means automatically returning the dials to normal, and means securing said signal in view position until a dial is next actuated.

86. In a device of the class described the combination with a plurality of dials each having numerals marked thereon of different valuations, a shaft for each dial, cams on each shaft corresponding to the number of numerals on its dial, a pawl bar for each cam positioned to be actuated thereby, a signal operatively connected to each pawl bar and appropriated to a numeral on the dial and means whereby only the pawl bar connected to the tablet corresponding to the numeral counted is actuated by the cams to move said tablet to view position.

87. In a device of the class described the combination with dials each having numerals of different values marked thereon, a cam for each value marked on the dials and actuated by the appropriate dial, a visible signal for each numeral on each dial, and marked with a corresponding numeral, a pawl bar connected with each visible signal and operatively positioned relatively to the

appropriate cam and a part on the pawl bar adapted to be engaged by the cam to actuate the same.

88. In a device of the class described the combination with dials each having numerals of different values marked thereon, of a cam for each value marked on the dials and actuated by rotation of the appropriate dial, a visible signal for each numeral on each dial marked with a corresponding numeral, sets of pawl bars corresponding in number to the number of the cams and visible signals and each positioned to be actuated by one of said cams, and operatively connected to display the appropriate signal, and means operated by said actuated pawl bar to move all the other pawl bars of the same set out of the path of travel of their cams.

89. In a device of the class described the combination with dials each having numerals of different values marked thereon, a cam for each value marked on the dials and actuated by rotation of the appropriate dial, a signal for each numeral on each dial marked with a corresponding numeral, a set of pawl bars corresponding in number to the number of the cams and visible signals, and each positioned to be actuated by one of said cams, and operatively connected to display the appropriate signal, and a detent adapted to engage the actuated pawl bar to prevent return thereof until the next actuation of a dial.

90. In a device of the class described the combination with dials each having numerals of different values marked thereon, a cam for each value marked on the dials and actuated by rotation of the appropriate dial, a visible signal for each numeral on each dial marked with a corresponding numeral, a set of pawl bars corresponding in number to the number of the cams and visible signals, and each positioned to be actuated by one of said cams, and operatively connected to display the appropriate signal, a detent to engage the pawl bar during the display of the signal and means acting to release the pawl bar when a dial is next actuated.

91. In a device of the class described the combination with dials each having numerals of different values marked thereon, of a cam for each value marked on the dials and actuated by rotation of the appropriate dial, a visible signal for each numeral on each dial marked with a corresponding numeral, a set of pawl bars for each dial corresponding in number to the number of the cams and visible signals for said dial, and each positioned to be actuated by one of said cams, means operatively connecting each pawl bar to display the appropriate signal, said cam appropriated to the number to be counted actuating its pawl bar to display the appropriate signal, means holding all the other pawl bars out of engagement with their cams and means automatically returning said pawl bars to normal position.

92. In a device of the class described the combination with concentric dials each having digits marked thereon, of a shaft for each dial, a set of tablets for each dial, marked successively to indicate the respective numerals on that dial, a pawl bar for each numeral operatively connected to each to actuate the corresponding tablet, a wheel on each dial shaft for each pawl bar and simultaneously movable, a tooth or cam on each adapted to actuate its pawl bar and means slidably securing the pawl bars in alinement with its respective cam.

93. In a device of the class described the combination with concentric dials each having digits marked thereon, of a shaft for each dial, sets of tablets, appropriated respectively to the successive digits on the dials, a pawl bar for each tablet, a tooth or cam on each shaft for each numeral on its dial and each adapted to actuate its pawl bar, means elevating all of the pawl bars out of the path of travel of the corresponding teeth or cams except that connected with the tablet corresponding to the count.

94. In a device of the class described the combination with concentric dials having numerals successively marked thereon, of a rotative shaft for each dial, a tablet for each numeral on the dials, and marked correspondingly, means operatively connected with each tablet adapted to elevate the same to view position, as its dial returns to normal after actuation to the limit from its numeral, means adapted to automatically return the tablet to normal position when any dial is next actuated and means spacing said tablets equal distances apart and preventing one from interfering with the movement of another.

95. In a device of the class described the combination with concentric dials independently movable of normally concealed signal tablets, a pawl bar operatively connected with each tablet and adapted to elevate the same, means operated by movement of one of the dials to actuate one of the pawl bars thereby elevating the appropriate tablet, to view position, a comb spacing the tablets appropriate distances apart and means spacing the pawl bars appropriate distances apart and preventing the movement of any of said bars interfering with the movement of the others.

96. In a device of the class described the combination with a casing having a view aperture therein, of dials journaled in the casing, a shaft for each dial, cams on each shaft, a pawl bar above each cam adapted to be moved thereby transversely of the shaft, a tablet operatively connected with and elevated to view position by the movement of the pawl bar, means automatically returning

the pawl bar to normal position prior to the actuation of the same, or another pawl bar, a comb positively securing each pawl bar in operative position and guiding the same in every movement, and means guiding the tablets when moving to and from view position.

97. In a device of the class described the combination with concentric dials, of an independent shaft for each dial, independent sets of signals for said dials, a set of cams on each dial shaft, a set of pawl bars for each dial and operatively connected to the respective signals for the corresponding dial and also extending into position to be operated by one of the cams of the corresponding dial, said dials adapted to simultaneously actuate to view position one of the signals of each set.

98. In a device of the class described the combination with concentrically arranged independently rotatable dials adapted all for simultaneous actuation, of a set of signals for each dial, mechanism actuated by the rotation of said dials, and operatively connected with the signals adapted to elevate one signal of each set to view position for a simultaneous actuation of two or more dials.

99. In a device of the class described the combination with concentrically arranged independently rotatable dials, of a set of signals for each dial, mechanisms actuated by the rotation of said dials and operatively connected with the signals adapted to elevate one signal of each set to view position on simultaneous actuation of two or more dials, and means holding all of the so actuated signals in elevated position until one or more of the dials are again actuated.

100. In a device of the class described the combination with concentrically arranged independently rotatable dials, of a set of signals for each dial, mechanisms actuated by the rotation of said dials and operatively connected with the signals adapted to elevate one signal of each set to view position on a simultaneous actuation of two or more dials, means holding said signals in elevated position until one or more of the dials are again actuated, and means automatically and simultaneously returning all signals to normal when a dial or dials are again actuated.

101. In a device of the class described the combination with dials each having finger sockets marked with successively increasing digits of a shaft for each dial, cams rigidly connected with said shaft, a gear on each shaft movable with the cams, signals for each dial corresponding in number to the number of digits thereon, and a signal marked "No Sale," independent means connected with each signal, and adapted to be actuated by one of said cams, a shaft extending longitudinally of the dial shafts, means operated from said shaft, affording an audible signal and a cam on said gear adapted to actuate the signal shaft when any dial is actuated.

102. In a device of the class described the combination with a plurality of concentric shafts of a separate dial engaged to each, a bell, visible signals normally out of observation position, a pawl bar engaged with each signal, a signal shaft, mechanism operatively connected with one end thereof and with the bell to afford an audible signal and mechanism carried on each dial shaft adapted during rotation of the dials in one direction to sound the bell and in the opposite direction of the dial to actuate a pawl bar to move the appropriate visible signal to view position.

103. In a device of the class described the combination with a plurality of concentric shafts of movable, concentric inter-fitting dials rigidly engaged to said shafts in the same vertical plane, a bell, a money drawer, means locking the same, mechanisms operated by forward movement of the dials to simultaneously sound the bell, unlock and automatically open the drawer, and means adapted on the return movement of the dial to automatically move the drawer locking means to locking position and set the audible signal mechanisms for another audible signal.

104. In a device of the class described the combination with rotative concentric, interfitting money dials of shaft therefor arranged concentrically, a visible signal for each registrable sum, a bell, a normally locked money drawer, mechanisms operated by rotation of one or more of said dials to move the visible signal corresponding with the sum registered to view position, to unlock said drawer and ring said bell.

105. In a device of the class described the combination with concentric rotative money dials, adapted to be manually actuated, of a visible signal for each sum registrable thereby, a money drawer, a locking bolt therefor, an audible signal apparatus, mechanisms actuated by rotation of one or more of the dials in one direction to sound the audible signal and to retract the locking bolt and open the drawer and means operated by opposite rotation of the said dial or dials to elevate one or more of the said visible signals.

106. In a device of the class described the combination with concentric rotative dials all arranged in the same vertical plane of a visible signal for each sum registrable thereby, a money drawer, a locking bolt therefor, an audible signal apparatus, mechanisms actuated by rotation of one or more of the dials to sound the audible signal and to retract the bolt, and open the drawer, means automatically returning the locking bolt to

locking position and means returning the audible signal apparatus to normal position.

107. In a device of the class described the combination with concentric rotative dials of a visible signal for each sum registrable thereby, a money drawer, a locking bolt therefor, an audible signal device, mechanisms actuated by rotation of one or more of the dials to sound the audible signal to move the visible signal to view position to retract the locking bolt and open the drawer, means automatically returning the locking bolt to locking position and a detent holding said visible signal in view position until a dial is again actuated.

108. In a device of the class described the combination with rotatable shafts of a dial connected on each and each having significant digits marked thereon, and one also having "No sale" marked thereon, a tablet for each digit and the "No sale" marked on the dials and marked each with its corresponding numeral, reciprocating elements operatively connected with each tablet, adapted when actuated to throw the tablet to view position, rotatable elements on each shaft equal in number to the tablets, and one adapted to actuate each of said reciprocating elements, and said actuated reciprocating element acting to elevate the other reciprocating elements out of operative relation with said rotatable elements and a spring detent adapted to hold all of said reciprocating elements in said positions, until the next actuation of one or more of the dials.

109. In a device of the class described the combination with rotative dials each marked with digits to represent values of different denomination, of an independent shaft for each dial, a set of simultaneously rotatable elements on each shaft corresponding to the number of digits on each dial and one rotatable element on one of said shafts for a "No sale" mark on one of the dials, an independent set of visible signals for each dial, the signals in each set corresponding in number with the number of digits on its dial, an independent set of pawl bars for each set of visible signals, each pawl bar having independent connection with the corresponding visible signal, one of said rotatable elements of one or more sets adapted singly or simultaneously to actuate the pawl bar or bars, corresponding with the transaction thereby elevating the signal or signals when one or more of the dials are simultaneously actuated.

110. In a device of the class described the combination with concentric shafts, of concentric dials, one engaged to each and having numerals marked thereon, a set of normally concealed visible signals for each dial, corresponding in number with the number of numerals on its dial, a set of pawl bars for each shaft, each bar operatively connected with the visible signal corresponding with the amount of its characteristic transactions, means holding the signal in view position and means adapted to release the pawl bar prior to actuating the same or another signal to view position.

111. In a device of the class described the combination with concentric shafts, of concentric dials engaged thereto, each having numerals marked thereon, a normally concealed visible signal for each station on the dial, a pawl bar operatively connected with each visible signal, mechanisms actuated by the dials for selectively elevating the appropriate signal when a dial or dials are actuated, means acting on the appropriate pawl bar for holding the signal in view position, mechanism for tripping the pawl bar and means for automatically returning the pawl bar and visible signal to normal position.

112. In a device of the class described the combination with concentric shafts, of concentric dials one secured to each shaft, and having numerals marked thereon, normally concealed visible signals one for each numeral station, on each dial, pawl bars corresponding in number with the signal and each operatively connected with the appropriate visible signal, cams on said shafts one for each pawl bar, each cam adapted to reciprocate its pawl bar and shift the remaining pawl bars from their cams and to elevate its signal into view, and means automatically returning the dials to stop at normal position after each actuation.

113. In a device of the class described the combination with a plurality of rotatable shafts of a disk on each having digit stations marked on the face thereof, a pawl bar for each digit station on each disk, a tooth on each pawl bar, a visible signal for each digit station on each disk and marked with a digit to correspond therewith, connections between each pawl bar and its corresponding visible signal, cams on said shafts movable with the respective disks one cam appropriated to each pawl bar and the cams spaced the respective distance apart peripherally to correspond with the arrangement of the digit stations and positioned to rotate in the plane of the teeth on said pawl bars, said disks adapted to rotate any cam past its corresponding pawl bar tooth, and said cam adapted to engage said tooth on the return of the dial thereby actuating the pawl bar to move its visible signal to view position, a pivotal support actuated by the actuated pawl bar and adapted to elevate all of the remaining pawl bars and means automatically returning all the pawl bars to normal when the dial is next actuated.

114. In a device of the class described the combination with dials of a shaft for each, cams on each shaft, visible signals, means

operated by the appropriate cam to throw one of said visible signals to view position and a stop simultaneously movable with the dial to limit the return movement thereof.

115. In a device of the class described the combination with rotative dials of a shaft for each, cams on each shaft, visible tablets for each dial, pawl bars, connected each with one of the tablets and one of which is operated by the appropriate cam at each rotation of the dials, to elevate a tablet to view position, a fixed stop, and stops movable with the cams adapted to contact the same to limit the rotation of the dials in both directions.

116. In a device of the class described the combination with dials having their vertical faces flush, of a shaft for each dial, cams on each shaft, visible signals for each dial, pawl bars one of which is operated by the appropriate cam at each rotation of the dial to operate a signal and coacting movable and fixed stops acting to limit the movement of the dials in both directions.

117. In a device of the class described the combination with dials having their vertical faces flush of a shaft for each dial, cams on each shaft, visible signals for each dial, pawl bars one of which is operated by the appropriate cam at each rotation of the dials to operate a signal, coacting movable and fixed stops to limit the movement of the dials in both directions and means adapted to prevent pounding of the stops.

118. In a device of the class described the combination with dials having their vertical faces flush of a shaft for each dial, cams on each shaft, visible signals for each dial, pawl bars one of which is operated by the appropriate cam at each rotation of a dial to operate one of the visible signals, coacting movable and fixed stop acting to limit the movement of the dials in both directions, means returning each dial automatically to normal positions after each actuation and regulable means varying the rate of return movement thereof.

119. In a device of the class described the combination with concentric dials, a shaft for each dial, visible signals for each dial, pawl bars respectively connected at one end to each of the signals, mechanisms actuated by rotation of the dials to selectively actuate the appropriate pawl bar to operate a signal, a stop limiting the downward rotation of the dials for each count, a fixed stop for each shaft, a stop rotatable with each shaft adapted to contact the fixed stop to limit the return movement of the dial to normal and means controlling the rate of return movement of the dials to prevent pounding.

120. In a device of the class described the combination with concentric dials, a shaft for each dial, visible signals for each dial, pawl bars respectively connected at one end with each of the signals, mechanism actuated by rotation of the dials to selectively actuate the appropriate pawl bar to operate its signal, a stop limiting the downward rotation of each dial for each count, a fixed stop for each shaft, a stop rotatable with each shaft adapted to contact the fixed stop to limit the return movement of the dial to normal and spring actuated means acting to return the dial after each actuation to normal.

121. In a device of the class described the combination with rotative concentric dials having finger recesses for manual actuation, concentric shafts, one for each dial, cams on each shaft equal in number to the finger apertures on its corresponding dial, signals one for each station or finger aperture on the dial, toothed pawl bars one appropriated to each cam and actuated thereby when the cam is moved sufficiently to engage said tooth on the return movement of the dial, operative connections between each pawl bar and one of the signals acting to elevate the signal to view position, a rigid stop adjacent each shaft, a stop movable with each shaft, adapted to contact the same to limit the return of the dial to normal, a bar extending longitudinally of the dial shaft, a detent supported by the bar adapted to engage each pawl bar as it elevates its signal, arms engaged to the bar, pawls thereon, and a cam carried by each shaft adapted to contact one of the pawls to raise said bar, thereby releasing the detent and means automatically returning the pawl bar and signal to normal.

122. In a device of the class described the combination with rotative dials of a shaft for each, cams on each shaft, visible signals or tablets for each dial, pawl bars one of which is operated by the appropriate cam, when the dial is rotated to elevate an appropriate signal to view position, means engaging the pawl bar to hold the signal in view position, a swinging bar extending longitudinally of the dial shaft, spring controlled pawls carried thereby and means actuated by the rotation of any dial to actuate said pawls to release the pawl bar, holding the signal in view position.

123. In a device of the class described the combination with rotative dials of a shaft for each, rigidly connected cams on each shaft, visible signals for each dial, pawl bars one of which is operated by the appropriate cam when the dial returns to normal position, means connecting each pawl bar with one of the visible signals to elevate the signal when the pawl bar is actuated, a detent engaging each pawl bar to hold the signal elevated, a swinging bar supporting said detent, and means elevating the swinging bar to move the detent out of engagement with the pawl bar.

124. In a device of the class described the combination with rotative dials of a shaft for each, rigidly connected cams on each shaft, visible signals for each dial, pawl bars one for each cam and operated thereby when the dial returns to normal position, means connecting each pawl bar with its visible signal to elevate the said signal when the pawl bar is actuated, a detent engaging each pawl bar to hold said signal elevated, a swinging bar supporting said detent, means elevating the swinging bar to move the detent out of engagement with the pawl bar and means automatically returning the pawl bar to normal positions moving the signal from view point.

125. In a device of the class described the combination with rotative dials of a shaft for each, rigidly connected cams on each, visible signals for each dial, pawl bars one of which is operated by the appropriate cam when the dial returns to normal position, means connecting each pawl bar and signal to elevate the signal when the pawl bar is actuated, a detent engaging each pawl bar to hold the signal elevated, a swinging bar supporting said detent, means elevating the swing bar to move the detent out of engagement with the pawl bar, means automatically returning the pawl bar to normal position moving the signal from view point, and means automatically returning the swinging bar and detent to normal position.

126. In a device of the class described the combination with rotative dials of a shaft for each, rigidly connected cams on each shaft, visible signals for each dial, pawl bars one of which is operated by the appropriate cam when the dial returns to normal position, means connecting each pawl bar with the appropriate visible signal to elevate said signal when the pawl bar is actuated, a detent engaging each pawl bar to hold the signal elevated, a swinging bar supporting said detent, means elevating the swinging bar to move the detent out of engagement with the pawl bar, and means returning the detent and swinging bar to normal position.

127. In a device of the class described the combination with rotative shafts of a dial on each, having digits marked on the faces thereof, visible signals or tablets each marked with a digit to correspond with the respective digit on the dials, pawl bars respectively connected with each visible signal, cams on each shaft one for each pawl bar adapted to reciprocate said bars to elevate said signal, a plate between said pawl bars and signals, a bar positioned to swing beneath the same, means supported by the swinging bar adapted to engage said pawl bar to hold the signal elevated, means operated by rotation of the dials to release said reciprocated pawl bar, a spring returning the swinging bar to normal position and a catch movable with the swinging bar adapted to engage said plate to limit the movement of said swinging bar in one direction.

128. In a device of the class described the combination with concentric rotative shafts of a dial on each, visible signal tablets having digits marked thereon, reciprocating means adapted to selectively elevate any tablet, means operated by the dial to actuate said reciprocating means to hold its tablet in new position until a dial is next rotated, means limiting the movement thereof, means operated by the dial to release said signal, and means permitting automatical returning of the signal to normal.

129. In a device of the class described the combination with rotative shafts of a dial secured to each, visible signal tablets having digits marked thereon, reciprocating means adapted to selectively elevate any tablet, means operated by the dial to actuate said reciprocating means and to hold each tablet in view position until a dial is next rotated, means limiting the movement thereof, means operated by the dial to release said signal, means permitting automatical returning of the signal to normal, and coacting stops limiting the movement of the dial.

130. In a device of the class described the combination with rotative shafts, of a dial on each, visible signal tablets having digits marked thereon, reciprocating means actuated from the dials adapted to selectively elevate any tablet, means holding each tablet in new position until a dial is next rotated, means limiting the movement thereof, means operated by any of the dials to release said signal, means automatically returning the signal to normal, coacting stops limiting the movement of the dial, and means controlling the rate of movement of said signals in one direction.

131. In a device of the class described the combination with rotative shafts, of a dial on each, visible signal tablets having a digit marked on each, reciprocating means adapted to selectively elevate any tablet, means operated by the dial to actuate said reciprocating means holding each tablet in view position until a dial is next rotated, means limiting the movement thereof, means operated by the dial to release said signal, means automatically returning the signal to normal, a bell and means operated by rotation of the dials to ring the same.

132. In a device of the class described the combination with concentric shafts, of a dial on each shaft, visible signal tablets having digits marked thereon, reciprocating means adapted to selectively elevate any tablet, mechanisms operated by the dials singly or

in multiple to actuate said reciprocating means to hold each tablet in view position until a dial is next rotated, mechanism limiting the movement thereof, means operated by the dials singly or in multiple to release said signals, means automatically returning the signals to normal, a bell, mechanism operated by rotation of any dial to ring the same, a normally locked drawer, and mechanisms operated by the rotation of the dials to unlock and to open the drawer as the bell rings.

133. In a device of the class described the combination with independently rotatable shafts, of an independent dial on each shaft, a gear wheel rigidly engaged on each shaft, a gear shaft extending longitudinally of the dial shafts, gears thereon, intermeshing respectively with the dial shaft gears, a governor, and operative connections between the governor and the gear shaft whereby the governor controls the rotation of the dials to normal position.

134. In a device of the class described the combination with a plurality of shafts, of a dial secured on each, a gear on each dial shaft, a ratchet extending longitudinally, ratchet wheels on said ratchet shaft, a gear journaled on said ratchet shaft adjacent each ratchet, and meshing with the gears on the dial shafts, a pawl carried by each gear on the ratchet shaft adapted to impart motion to the ratchet shaft when any dial or dials is moving in one direction and a governor driven from the ratchet shaft, to regulate the rate of movement of the dials in one direction.

135. In a device of the class described the combination with rotative money shafts, of a gear on each, a ratchet shaft extending longitudinally thereof, ratchet wheels thereon, independently rotatable gears on said ratchet shaft adjacent the ratchet wheels and driven from the gears on the money shafts, a pawl movable with each gear on the ratchet shaft adapted to engage the corresponding ratchet wheel to rotate the ratchet shaft when the money shaft or shafts rotate in one direction, and a centrifugal governor driven from the ratchet shaft and regulating the rate of movement of the dials in one direction.

136. In a device of the class described the combination with concentric dials of a shaft for each dial, signals adapted one to be elevated when each dial is actuated, pawl bars one pivoted at one end with each signal, said pawl bar having an upwardly directed tooth, a downwardly directed tooth and a downwardly directed notch, a cam for each pawl bar adapted to engage the downwardly directed tooth to elevate the signal connected to the pawl bar, a support having a rounded upper end adapted to support the pawl bars and engaging on one side of the notch and means engaging the upwardly directed tooth on each bar as the same is actuated to elevate a signal.

137. In a device of the class described the combination with concentric dials of a shaft for each dial, signal tablets adapted to be selectively elevated when each dial is actuated, pawl bars, one pivoted at one end to each tablet, each pawl bar having a downwardly opening notch, an upwardly directed tooth, and a downwardly directed tooth, a cam for each pawl bar adapted to engage the downwardly directed tooth to elevate the signal connected to the pawl bar, a support having a rounded upper end adapted to support the pawl bars and engaging on one side of the notch, means engaging the upwardly directed tooth on each bar as the same is actuated to elevate a signal, and means adjusting said support as to height.

138. In a device of the class described the combination with concentric dials of a shaft for each dial, signal tablets adapted each to be elevated for different fractional rotations of the respective dials, a lever integral with each tablet, a rod connecting one end of each lever, a bell crank engaged by one arm to each rod, a rod connected to the other arm of said bell crank, a pawl bar pivotally engaged on each of said last named rods, oppositely directed teeth thereon and a notch intermediate the teeth, an adjustable and pivoted support for said pawl bars positioned in front of said notch, means adapted to engage one of the teeth on the pawl bar when a dial is actuated to elevate the signal, a detent engaging the oppositely directed tooth to hold the pawl bar from return movement, and mechanisms releasing the pawl bar and returning the same to normal position when a dial is next actuated.

139. In a device of the class described the combination with interfitting rotative dials each marked with significant digits and arranged in the same vertical plane, mechanisms operated thereby to display as a visible signal the amount of each successive transaction, a crown gear operated by each dial and having teeth equal in number with the digits marked on its respective dial, a register for each dial and means operated by said crown gears to register the amount of each transaction.

140. In a device of the class described the combination with concentric rotative dials each marked with significant digits and arranged in the same vertical plane, means operated thereby to display as a visible signal the amount of each successive transaction, a crown gear operated by each dial and having teeth equal in number with the digits marked on its respective dial, a register for each dial, means operated by said crown

gears to register the amount of each transaction, and operative connections between the registers of different denominations to transfer a count of ten from each lower to a higher denomination register.

141. In a device of the class described the combination with rotative dials each marked with significant digits of mechanisms operated thereby to display as a visible signal the amount of each successive transaction, a crown gear operated by each dial and having teeth equal in number with the digits marked on its respective dial, a register for each dial, mechanism operated from said crown gears to register the amount of each transaction, operative connections between the registers, of different denominations to transfer a count of ten from each lower to a higher denomination register, and alternate registers registering the transactions when rotating oppositely.

142. In a device of the class described the combination with rotative dials each marked with significant digits, mechanisms operated thereby to display as a visible signal the amount of each successive transaction, a crown gear operated by each dial each having teeth equal in number with the digits marked on its respective dial, a register for each dial, means operated by said crown gears to register the amount of each transaction, operative connections between the registers of different denominations to transfer a count of ten from each lower to a higher denomination register, some of the registers registering the count upon the downward rotation of the dials, and one of said registers registering the count on the return of its dial to normal position.

143. In a device of the class described the combination with rotative concentric dials having digits marked thereon and "No sale" marked on one, mechanisms adapted to display a visible signal for the amount of each transaction, a crown gear for each dial and operative connections to drive the same thereby, teeth on each crown gear corresponding in number with the digits on the corresponding dial, a registering wheel for each dial, radially directed pivoted teeth on each registering wheel, extending into the path of and actuated by the teeth on the appropriate crown wheel, and said crown wheel adapted to actuate the number of teeth on each registering wheel corresponding to the amount of the transaction as shown on the visible signals of the respective dial.

144. In a device of the class described the combination with rotative concentric dials having digits marked thereon and "No sale" marked on one, means adapted to display a visible signal for the amount of each transaction, a crown gear for each dial and driven thereby, said gears having teeth corresponding in number to the digits on their corresponding dial, a registering wheel for each dial, radially directed pivoted teeth on each registering wheel, the teeth on each wheel extending in the path of and actuated by the teeth on the appropriate crown wheel, said crown wheel adapted to actuate the number of teeth on each registering wheel corresponding to the amount of the transaction as shown on the visible signals of the respective dial, and means adapted for each rotation of a registering wheel of a lower denomination to actuate the next higher denomination registering wheel one tooth.

145. In a device of the class described the combination with rotative concentric dials having digits marked thereon, and "No sale" marked on one, means adapted to display a visible signal for the amount of each transaction, a crown gear for each dial and driven thereby, said gear having teeth corresponding in number to the digits on their corresponding dial, a registering wheel for each dial, radially directed pivoted teeth on each registering wheel, the teeth on each wheel extending in the path of and actuated by the teeth on the appropriate crown wheel, said crown wheel adapted to actuate the number of teeth on each registering wheel corresponding to the amount of the transaction as shown on the visible signals of the respective dials, means adapted for each rotation of a registering wheel of a lower denomination, to actuate the next higher denomination registering wheel one tooth, and means whereby each registering wheel is held from rotation opposite to its counting direction.

146. In a device of the class described the combination with rotative dials having digits marked thereon, of means actuated thereby to display a visible signal to correspond to the amount of each transaction, an independent wheel actuated by rotation of each dial, axially directed teeth engaged to each wheel corresponding in number to the number of digits on the dial from which driven, registering wheels for serial counting, one for each dial, an equal number of radially directed teeth pivoted to each registering wheel extending in the path of travel of the axially directed teeth and actuated thereby when the dial is rotated and means transferring the amount in series from a lower to a higher denomination registering wheel.

147. In a device of the class described the combination with rotative dials having digits marked thereon, of means actuated thereby to display a visible signal to correspond to the amount of each transaction, an independent wheel actuated by rotation of each dial, axially directed teeth engaged to each wheel corresponding in number to the number of digits on the dial from which

driven, registering wheels for serial counting, one for each dial, an equal number of radially directed teeth pivoted to each registering wheel extending in the path of travel of the axially directed teeth and actuated thereby when the dial is rotated, means transferring the amount in series from a lower to a higher denomination registering wheel, and a governor regulating the rate of movement of said dial during part of its rotation.

148. In a device of the class described the combination with rotative dials having digits marked thereon, of means actuated thereby to display a visible signal to correspond to the amount of each transaction, an independent wheel actuated by rotation of each dial, axially directed teeth engaged to each wheel corresponding in number to the number of digits on the dial from which driven, registering wheels for serial counting, one for each dial, an equal number of radially directed teeth pivoted to each registering wheel extending in the path of travel of the axially directed teeth and actuated thereby when the dial is rotated, means transferring the amount in series from a lower to a higher denomination registering wheel, a governor regulating the rate of movement of each dial during part of its rotation, and a stop limiting the movement of each dial in registering up the count.

149. In a device of the class described the combination with rotative dials having digits marked thereon, of means actuated thereby to display a visible signal to correspond to the amount of each transaction, an independent wheel actuated by rotation of each dial, axially directed teeth engaged to each wheel corresponding in number to the number of digits on the dial from which driven, a registering wheel for serial counting, one for each dial, an equal number of radially directed teeth pivoted to each registering wheel extending in the path of travel of the axially directed teeth and actuated thereby when the dial is rotated, means transferring the amount in series from a lower to a higher denomination registering wheel, a governor regulating the rate of movement of said dial during part of its rotation, a stop limiting the movement of each dial in registering up the count, a bell and mechanism operated by the downward movement of the dials to ring said bell.

150. In a device of the class described the combination with the rotative dials, of a shaft for each dial, a gear on each shaft, a shaft extending longitudinally of the dial shafts, gears thereon, one intermeshing with each gear on the dial shafts, a crown gear rotatable with each gear on the dial shafts, and a registering wheel actuated by each crown wheel to independently register the transactions as counted by each dial.

151. In a device of the class described the combination with rotative dials, of a shaft for each dial, a gear on each shaft, a shaft extending longitudinally of the dial shafts, gears thereon, one intermeshing with each gear on the dial shaft, a crown wheel for each gear on the last named shaft and actuated by rotation of its respective gear, a registering wheel actuated by each crown wheel to independently register the transactions as counted by each dial, and a signal adapted to display the amount of the transaction as registered by each registering wheel.

152. In a device of the class described the combination with rotative dials, of a shaft for each dial, a gear on each shaft, a shaft extending longitudinally of the dial shafts, gears thereon, one intermeshing with each gear on the dial shafts, a crown gear rotatable with each gear on the dial shaft, a registering wheel actuated by each crown wheel to independently register the transactions as counted by each dial, a signal adapted to display the amount of the transaction as registered by each registering wheel, and means adapted to return the displayed signals to normal position, when the dial is next moved downwardly.

153. In a device of the class described the combination with rotative dials, of a shaft for each dial, a gear on each shaft, a shaft extending longitudinally of the dial shafts, gears thereon, one intermeshing with each gear on dial shaft, a crown gear rotatable with each gear on the dial shaft, a registering wheel actuated by each crown wheel to independently register the transactions as counted by each dial, and means automatically returning the dial to normal position.

154. In a device of the class described the combination with rotatable concentric dials each having digits marked thereon, means automatically displaying the amount of each transaction, an audible signal actuated by rotation of the dial, a money drawer automatically opened by movement of the dials, an independent register for each dial, and means operated by actuation of each dial to transfer the count to the appropriate register.

155. In a device of the class described the combination with rotatable dials each having digits marked thereon, means automatically displaying the amount of each transaction, an audible signal actuated by rotation of the dials, a money drawer automatically opened by movement of the dials, an independent register for each dial, means operated by actuation of each dial to transfer the count to the appropriate register, means transferring the amount from each lower to the next higher denomination register and mechanism adapted to transfer the joint amount of all the lower denomina-

tion registers to the highest denomination register.

156. In a device of the class described the combination with concentric, interfitting rotatable dials having their front faces approximately flush, a visible signal and an audible signal of registering wheels, one appropriated to register the count from each dial, means registering the amount of each transaction on the appropriate register when the dials are rotated and means adapted to simultaneously transfer the count from a lower denomination to a higher denomination register.

157. In a device of the class described the combination with rotatable dials, a visible signal and an audible signal of registering wheels, one appropriated to register the count from each dial, means registering the amount of each transaction on the appropriate register when the dials are rotated, means adapted to simultaneously transfer the count from a lower denomination to a higher denomination register, said lower denomination register rotating oppositely from the register to which the count is transferred.

158. In a device of the class described the combination with rotatable dials, a visible signal and an audible signal of registering wheels, one appropriated to register the count from each dial, means registering the amount of each transaction on the appropriate register when the dials are rotated, means adapted to simultaneously transfer the count from a lower denomination to a higher denomination register, said lower denomination register rotating oppositely from the register to which the count is transferred, thereby avoiding all possible error of transferring only one count when both the dial is actuated and a count from a lower register is transferred simultaneously to the same register and a centrifugal governor controlling the movement of the dial to prevent undue impact when returning to normal position.

159. In a device of the class described the combination with rotatable registering devices, each registering device adapted to operate when moving oppositely from the next higher and lower registering devices, rotatable actuating dials each marked with digits and each representing a different denomination, rotatable elements transferring the count from said actuating dials singly or simultaneously to said registering devices and means transferring the count from a lower to a higher denomination registering device.

160. In a device of the class described the combination with rotatable registering devices, rotatable actuating dials each marked with digits and adapted for manual actuation, crown wheels transferring the count from the manually actuated rotatable dials to the rotatable registering devices and means adapted to transfer the count from a lower to a higher denomination register simultaneously with the actuation of the lower denomination register.

161. In a device of the class described the combination with rotatable registering devices, rotatable dials each marked with digits and adapted for manual actuation, rotatable elements transferring the count from said manually actuated dials to the registering devices, means adapted to transfer the count to the highest denomination register from any lower denomination register when the amount transferred equals one on said highest denomination register, mechanism for locking the higher denomination registering devices from movement in their registering direction and means releasing said means prior to each registration.

162. In a device of the class described the combination with rotative penny, dime and dollar registers, rotatable penny, dime and dollar elements marked with digits, said elements interfitted and all adapted to be operated simultaneously with the same hand, rotative elements independently transferring the count from one or more of said rotatable penny, dime and dollar elements to the appropriate register, and means whereby the count of ten from a lower denomination register is transferred to a higher denomination register either when the tenth count is transferred from one of the rotatable elements marked with the digits, or when the tenth count is transferred from the next lower denomination register.

163. In a device of the class described the combination with rotative penny, dime and dollar registers, penny dime and dollar dials marked with digits, rotatable elements transferring the count from each dial to its corresponding register, means whereby a count is transferred to the dollar register from the dime register either when the dime dial transfers the tenth count to the dime register or when the tenth count is transferred to the dime register from the penny register and a governor adapted to control the rate of movement of all rotatable elements in one direction.

164. In a device of the class described the combination with rotative penny, dime and dollar registers, penny dime and dollar dials marked with digits, rotatable elements transferring the count from each dial to its corresponding register, means whereby a count is transferred to the dollar register from the dime register either when the dime dial transfers the tenth count to the dime register or when the tenth count is transfered to the dime register from the penny register and a stop limiting the movement of the dials in transferring the count.

165. In a device of the class described the combination with rotative penny, dime and dollar registers, penny dime and dollar dials marked with digits, rotatable elements transferring the count from each dial to its corresponding register, means whereby a count is transferred to the dollar register from the dime register either when the dime dial transfers the tenth count to the dime register or when tenth count is transferred to the dime register from the penny register, a stop limiting the movement of the dials in transferring the count, a stop limiting the return of each dial to normal and means automatically returning the dials to normal.

166. In a device of the class described the combination with rotative penny, dime and dollar registers, penny dime and dollar dials marked with digits, rotatable elements transferring the count from each dial to its corresponding register, means whereby a count is transferred to the dollar register from the dime register either when the dime dial transfers the tenth count to the dime register or when the tenth count is transferred to the dime register from the penny register, a stop limiting the movement of the dials in transferring the count, a stop limiting the return of each dial to normal position, means automatically returning the dials to normal and means regulating the rate of return movement of said dials.

167. In a device of the class described the combination with rotative penny, dime and dollar registers, penny dime and dollar dials marked with digits, rotatable elements transferring the count from each dial to its corresponding register, means whereby a count is transferred to the dollar register from the dime register when the dime dial transfers the tenth count to the dime register or when the tenth count is transferred to the dime register from the penny register, a stop limiting the movement of the dials in transferring the count, a stop limiting the movement of the dials when returning to normal position, means automatically returning the dials to normal position, means regulating the rate of return movement of said dials and means actuated by rotation of either dial to sound an audible signal.

168. In a device of the class described the combination with rotative penny, dime and dollar registers, penny, dime and dollar dials marked with digits, rotatable elements transferring the count from each dial to its corresponding register, means whereby a count is transferred to the dollar register from the dime register when the dime dial transfers the tenth count to the dime register or when the tenth count is transferred to the dime register from the penny register, a stop limiting the movement of the dials in transferring the count, a stop limiting the movement of the dials when returning to normal position, means automatically returning the dials to normal position, means regulating the rate of return movement of said dials, means actuated by rotation of either dial to sound an audible signal, a money drawer and means operated by rotation of any of said dials to automatically open said drawer.

169. In a device of the class described the combination with rotative penny, dime and dollar registers, penny dime and dollar dials marked with digits, rotatable elements transferring the count from each dial to its corresponding register, means whereby a count is transferred to the dollar register from the dime register when the dime dial transfers the tenth count to the dime register or when the tenth count is transferred to the dime register from the penny register, a stop limiting the movement of the dials in transferring the count, a stop limiting the movement of the dials when returning to normal position, means automatically returning the dials to normal position, means regulating the rate of return movement of said dials, an audible signal, means actuated by actuation of either dial to sound said signal, a money drawer, means operated by rotation of any of said dials to automatically open said drawers and means operated by any of said dials to display a signal representing the amount of each transaction.

170. In a device of the class described the combination with rotatable dials appropriated to dollars, dimes and pennies, dollar, dime and penny registers, one for each dial, in independent rotatable mechanism actuated by each dial to transfer the count to the corresponding register, a locking mechanism for the dime register, means operated by the penny register to throw said lock out of engagement and means transferring a count from said penny register to the dime register when the lock is out of engagement with the dime register.

171. In a device of the class described the combination with rotative dials appropriated to dollars, dimes and pennies, dollar, dime and penny registers, one for each dial, independently rotatable mechanisms actuated by each dial to transfer the count to the corresponding register, a locking mechanism for the dime register, means operated by the penny register to throw said lock out of engagement, means transferring a count from said penny register to the dime register when the lock is out of engagement with the dime register and means operated by actuation of the penny dial when the count to be transferred from the penny register to the dime register completes a count for the dollar register, to actuate the dollar register to make the count.

172. In a device of the class described the combination with rotatable dials appropriated to dollars, dimes, and pennies, dollar,

dime and penny registers, one for each dial, independent rotatable mechanism actuated by each dial to transfer the count to the corresponding register, a locking mechanism for the dime register, means operated by the penny register to throw said lock out of engagement, means transferring a count from said penny register to the dime register when the lock is out of engagement with the dime register and means automatically returning the lock to normal position.

173. In a device of the class described the combinatiton with rotatable dials appropriated to dollars, dimes and pennies, dollar, dime and penny registers, one for each dial, independently rotatable mechanism actuated by each dial to transfer the count to the corresponding register, a locking mechanism for the dime register, means operated by the penny register to throw said lock out of engagement, means transferring a count from said penny register to the dime register when the lock is out of engagement with the dime register, means operated by actuation of the penny dial when the count to be transferred from the penny register to the dime register completes a count for the dollar register, to actuate the dollar register to make the count and means automatically returning the dollar register actuating means to normal position.

174. In a device of the class described the combination with a dollar, a dime and a penny register of dials one appropriated to each register and adapted to actuate its corresponding register independently of the actuation of the other registers and all of said dials adapted to be actuated simultaneously thereby registering the count on the respective registers independent of and simultaneously with the others.

175. In a device of the class described the combination with a dollar, a dime and a penny register of dials, one appropriated to each register and adapted to actuate its corresponding register independently of the actuation of the other registers and all of said dials adapted to be actuated simultaneously thereby registering the count on the respective registers independent of and simultaneously with the others and means adapted to transfer a count of the penny register equivalent to one count on the dime register from the penny register to the dime register simultaneously as the dials are actuated.

176. In a device of the class described the combination with a dollar, a dime and a penny register of dials one appropriated to each register and adapted to actuate its corresponding register independently of the actuation of the other registers and all of said dials adapted to be actuated simultaneously thereby registering the count on the respective registers independent of and simultaneously with the others and means adapted to transfer a count from the dime register equivalent to a count on the dollar register to the dollar register simultaneously as a count is transferred from the penny register to the dime register.

177. In a device of the class described the combination with dials appropriated to pennies, dimes and dollars, a penny, a dime and a dollar register, each actuated by rotation of the respective dial to register each transaction, means actuating the dime register independently of the rotation of its respective dial to transfer a count from the penny register thereto, mechanism locking the dime register from movement in both directions and means for releasing the mechanism locking said register from movement in its registering direction.

178. In a device of the class described the combination with interfitting, concentric dials adapted all to be actuated with one hand at the same time and appropriated to pennies, dimes and dollars, a penny, a dime and a dollar register each actuated by actuation of the respective dial to register each transaction, means actuating the dime register independently of the rotation of its respective dial to transfer a count from the penny register to the dime register and means automatically returning the means to normal position after the dime register has received the count.

179. In a device of the class described the combination with rotative dials appropriated to dollars, dimes and pennies of registers appropriated to dollars, dimes and pennies, a set of concentric shafts for the dials, an independent set of concentric shafts for the registers, means operatively connecting the registers with the corresponding dial whereby actuation of one or more dials transfers the count to the respective register, means transferring the count from each lower to the next higher denomination register and means adapted to display the aggregate amount of the transaction as transferred to all of said registers from the dials.

180. In a device of the class described the combination with rotative concentric dials all positioned at the same end of the machine, appropriated to dollars, dimes and pennies, of registers appropriated to dollars, dimes and pennies, means operatively connecting the registers with the corresponding dial whereby actuation of one or more dials transfers the count to the respective register, means for transferring the count from each lower to the next higher denomination register, means adapted to display the aggregate amount of the transaction as transferred to all of said registers from the dials and means automatically returning the display mechanism to normal position when the dial is next actuated.

181. In a device of the class described the combination with rotative dials appropriated to dollars, dimes and pennies of registers appropriated to dollars, dimes and pennies, means operatively connecting the registers with the corresponding dial whereby actuation of one or more dials transfers the count to the respective register, means for transferring the count from each lower to the next higher denomination register, means adapted to display the aggregate amount of the transaction as transferred to all of said registers from the dials, means automatically returning the display mechanism to normal position when the dial is next actuated, stops limiting the movement of each dial in each direction and means automatically returning each dial to normal prior to the next count.

182. In a device of the class described the combination with rotative dials appropriated to dollars, dimes and pennies of registers appropriated to dollars, dimes and pennies, means operatively connecting the registers with the corresponding dial whereby actuation of one or more dials transfers the count to the respective register, means for transferring the count from each lower to the next higher denomination register, means adapted to display the aggregate amount of the transaction as transferred to all of said registers from the dials, means automatically returning the display mechanism to normal position when the dial is next actuated, stops limiting the movement of each dial in each direction, means automatically returning each dial to normal prior to the next manual actuation of any dial and a centrifugal governor regulating the rate of return of the dials to normal position.

183. In a device of the class described the combination with rotative dials appropriated to dollars, dimes and pennies, of registers appropriated to dollars, dimes and pennies, means operatively connecting the registers with the corresponding dial whereby actuation of one or more dials transfers the count to the respective register, means for transferring the count from each lower to the next higher denomination register, means adapted to display the aggregate amount of the transaction as transferred to all of said registers from the dials, means adapted to automatically returning the display mechanism to normal position when any dial is next actuated, stops limiting the movement of each dial in each direction, means automatically returning each dial to normal position prior to the next count, a centrifugal governor regulating the rate of return of the dials to normal position and means for locking said dials from rotation.

184. In a device of the class described the combination with dials appropriated to dollars, dimes and pennies, a register for each dial and actuated thereby to register the count, means actuating each higher denomination register independently of the respective dial to transfer a count thereto from each higher denomination register, a pawl normally locking each higher denomination register from movement and means releasing said pawl prior to the transfer.

185. In a device of the class described the combination with dials appropriated to dollars, dimes and pennies, a register for each dial and actuated thereby to register the count, means actuating each higher denomination register independently of the respective dial to transfer a count thereto from each lower denomination register, a pawl normally locking each higher denomination register from movement, means releasing said pawl prior to the transfer and means automatically returning each pawl to lock its respective register after the transfer.

186. In a device of the class described the combination with dials appropriated to dollars, dimes and pennies, a register for each dial and actuated thereby to register the count, means actuating each higher denomination register independently of the respective dial to transfer a count thereto from each lower denomination register, a pawl normally locking each higher denomination register from movement, means releasing said pawl prior to the transfer and signals actuated by the dials to display the amount of each transaction.

187. In a device of the class described the combination with a plurality of concentric, interfitting dials having their outer faces flush and each marked with significant digits, registers appropriated to dollars, dimes and pennies and operated by actuation of the dials, teeth on each lower denomination register corresponding when the register makes a complete revolution to the value of the movement of a tooth of the next higher denomination register and means imparting for each revolution of a lower denomination register a fraction of a revolution to the next higher denomination register.

188. In a device of the class described the combination with dials appropriated to dollars, dimes and pennies, registers appropriated to dollars, dimes and pennies, mechanism operated by actuation of the dials to transfer the amount to the respective registers, means adapted for each revolution of a lower denomination register to impart $\frac{1}{10}$ of a revolution to the next higher denomination register, means adapted when the dime register has made $\frac{9}{10}$ of a revolution and the penny register has made $\frac{9}{10}$ of a revolution to impart $\frac{1}{10}$ of a revolution to both the dime and dollar registers when the penny register is next actuated and alternate registers acting

in opposite directions and means regulating the rate of movement of the dials.

189. In a device of the class described the combination with dials each marked with the significant digits and appropriated to dollars, dimes and pennies. a register for each dial and actuated by rotation of the respective dial, ten spring controlling teeth on the dime and on the penny register, means imparting to the dime register $\frac{1}{10}$ of a revolution for each revolution of the penny register and means imparting a fraction of a revolution to the dollar register for each revolution of the dime register.

190. In a device of the class described the combination with dials each marked with significant digits and appropriated to dollars, dimes and pennies, a register for each dial actuated by rotation of the respective dial and appropriated to dollars, dimes and pennies, ten spring controlled teeth on each of the dime and penny dials, means imparting a fraction of a revolution to the dollar register for each revolution of the dime dial and means adapted when the dime register has made $\frac{9}{10}$ of a revolution to impart a fraction of a revolution to the dollar register upon actuating either the penny or dime dials.

191. In a device of the class described the combination with dials each marked with significant digits and appropriated to dollars, dimes and pennies, a register for each dial actuated by rotation of the respective dial and appropriated to dollars, dimes and pennies, spring controlled teeth on each of the penny and dime dials, means imparting a fraction of a revolution to the dollar register for each revolution of the dime register, means adapted when the dime register has made $\frac{9}{10}$ of a revolution and the penny register has hade $\frac{9}{10}$ of a revolution to impart a fraction of a revolution to the dollar register upon actuating either the penny or dime dials, and one of said registers moving oppositely from the others and means limiting the movement of each dial.

192. In a device of the class described the combination with rotative dials each marked with digits and adapted for manual actuation, a shaft for each dial, a set of cams thereon, a set of pawl bars positioned above each set of cams, a set of signals for each set of pawl bars and one pawl bar engaged to each signal, a register for each dial and appropriated to dollars, dimes and pennies, means whereby actuation of one or more dials actuates the cams to move only the signal representing the amount of the transaction to view position and means operated by actuation of the dials to register the transaction as shown by the visible signal.

193. In a device of the class described the combination with rotative dials each marked with digits and adapted for manual actuation, a shaft for each dial, a set of cams thereon, a set of pawl bars positioned above each set of cams, a set of signals for each set of pawl bars and one pawl bar engaged to each signal, a register for each dial and appropriated to dollars, dimes and pennies, means whereby actuation of one or more dials actuates the cams to move only the signal representing the amount of the transaction to view position, means adapted by actuation of the dials to register the transaction as shown by the visible signal, stops movable by the dials and a stop coacting therewith to limit the movement of said dials.

194. In a device of the class described the combination with a dollar, a dime and a penny dial having digits marked thereon and a "no sale" station on one dial, a set of signals for each dial corresponding in number to the digits thereon and marked accordingly, a set of pawl bars for each dial and one pawl bar operatively connected to each signal, registers appropriated to dollars, dimes and pennies, means operated by actuation of any dial to transfer the count to the respective register and means actuated by either dial to selectively engage the appropriate pawl bar to move the signal to exhibit the transaction.

195. In a device of the class described the combination with a dollar, a dime and a penny dial each having digits marked thereon and a "no sale" station on one dial, a set of signals for each dial corresponding in number to the digits thereon and marked accordingly, a set of pawl bars for each dial and one pawl bar operatively connected with each signal, registers appropriated to dollars, dimes and pennies, means operated by actuation of any dial to transfer the count to the respective register, means actuated by any dial to selectively engage the appropriate pawl bar to move the signal to exhibit the transaction and means adapted to transfer a count from a lower denomination register to a higher denomination register when said count equals the series of said higher register.

196. In a device of the class described the combination with a dollar, a dime and a penny dial each having digits marked thereon and a "no sale" station on one dial, a set of signals for each dial corresponding in number to the digits thereon and marked accordingly, a set of pawl bars for each dial and one pawl bar operatively connected with one of the signals, registers appropriated to dollars, dimes and pennies, means operated by actuation of any dial to transfer the count to the respective register, means actuated by either dial to selectively engage the appropriate pawl bar to move the signal to exhibit the transaction, means adapted to transfer a count from a lower

denomination register to a higher denomination register when said count equals one of the series of said higher denomination register and means automatically returning the dials to normal position.

197. In a device of the class described the combination with a dollar, a dime and a penny dial, each having digits marked thereon and a "no sale" station on one dial, a set of signals for each dial corresponding in number to the digits thereon and marked accordingly, a set of pawl bars for each dial and each pawl bar operatively connected with the appropriate signal, registers appropriated to dollars, dimes and pennies, means operated by actuation of any dial to transfer the count to the respective register, means actuated by either dial to selectively engage the appropriate pawl bar to move the signal to exhibit the transaction, means adapted to transfer a count from a lower denomination register to a higher denomination register, when said count equals one of the series of said higher denomination register, means automatically returning the dials to normal position and a centrifugal governor preventing severe compact of the mechanisms when said dials return to normal position.

198. In a device of the class described the combination with rotative dials each marked with digits and each adapted for manual actuation, a signal for each digit on the dials and marked accordingly, registers appropriated to dollars, dimes and pennies, means adapted to transfer the transaction to the respective register when the dials are actuated, means operated by the same actuation of the dials to raise the appropriate signal, means holding the displayed signal in view position until any dial is again actuated, means automatically returning the displayed signals to normal and means automatically transferring a count from a lower to a higher denomination register when the amount of said lower denomination register equals one of the series of the next higher denomination register.

199. In a device of the class described the combination with a dial, a visible signal and means displaying the same of a dollar, a dime and a penny register, an independent shaft for each, a ratchet on each shaft, a lock for the dime register, means rotated by the penny shaft to throw said lock out of engagement, and means simultaneously engaging the ratchet on the dime shaft to actuate said shaft to transfer a count to the dime register.

200. In a device of the class described the combination with a dial, a visible signal and means displaying the same of a dollar, a dime and a penny register, an independent shaft for each, a ratchet on each shaft, a lock for the dime register, means rotated by the penny shaft to throw said lock out of engagement, means adapted to simultaneously engage the ratchet on the dime shaft to actuate said shaft to transfer a count to the dime register and means returning the lock to normal position after the transfer of the count.

201. In a device of the class described the combination with a plurality of dials appropriated to dollars, dimes and pennies, a visible signal to represent the amount of each transaction, registers appropriated to dollars, dimes and pennies and each actuated independently of the others by the respective dial, an independent shaft for each register, a ratchet rigidly engaged to the dime shaft and rotatable with the dime register, a pawl adjacent the same, means locking the register from movement, means moving said lock out of engagement with the dime register and means adapted to immediately actuate said pawl to move said ratchet to transfer a count from the penny to the dime register.

202. In a device of the class described the combination with a dollar, a dime and a penny dial, each marked with digits, a signal for each digit on the dials and marked correspondingly, registers appropriated to dollars, dimes and pennies and each actuated by the respective dial, a shaft rigidly engaged to each register, a ratchet rigidly engaged to the dime shaft, a reciprocating pawl adjacent the same, means normally holding the dime register from movement and means operated by the penny shaft to release the dime register and to reciprocate the pawl to actuate the ratchet thereby transferring a count to the dime register independently of the actuation of the dime dial.

203. In a device of the class described the combination with a dollar, a dime and a penny dial, each marked with digits, a signal for each digit on the dial and marked correspondingly, registers appropriated to dollars, dimes and pennies and each actuated by the respective dial, a shaft rigidly engaged to each register, a ratchet rigidly engaged to the dime shaft, a reciprocating pawl adjacent the same, means normally holding the dime register from movement, means operated by the penny shaft to release the dime register and to reciprocate the pawl to actuate the register thereby transferring a count to the dime register independently of the actuation of the dime dial and means adapted by actuation of the penny dial to transfer a count to the dollar register independently of the actuation of the dollar and dime dial when the dime register and penny register have made 9/10 of a revolution.

204. In a device of the class described the combination with dials each having

digits marked thereon and appropriated to dollars, dimes and pennies, of an appropriate signal elevated by the actuation of the dials, registers appropriated to dollars, dimes and pennies, a rotatable element driven by each dial and adapted to actuate each register, a lock for the dime register and means carried by the rotatable element adapted to release the lock prior to actuating the register when the dime dial is actuated.

205. In a device of the class described the combination with dials each having digits marked thereon and appropriated to dollars, dimes and pennies, dollar, dime and penny registers, a rotatable element driven by each dial and adapted to actuate the appropriate register, a lock for the dime register, means carried by one of the rotatable elements adapted to release the lock prior to actuating the register when the dime dial is actuated, means actuated by rotation of the penny register to release said dime register lock independently of said rotatable element and means operated by rotation of the penny register to actuate the dime register to receive a count from the penny register.

206. In a device of the class described the combination with dials each having digits marked thereon and appropriated to dollars, dimes and pennies of an appropriate signal elevated by actuation of the dials, registers appropriated to dollars, dimes and pennies, a rotatable element driven by each dial and adapted to actuate each register, a lock for the dime register, means carried by one of the rotatable elements adapted to release the lock prior to actuating the register when the dime dial is actuated, means actuated by rotation of the penny register to release said dime register lock independently of said rotatable element, means operated by rotation of the penny register to actuate the dime register to receive a count from the penny register, means holding each signal into view position until any dial is again actuated and means limiting the return of the dial to normal.

207. In a device of the class described the combination with dials each having digits marked thereon and appropriated to dollars, dimes and pennies, of an appropriate signal elevated by actuation of the dials, registers appropriated to dollars, dimes and pennies, a rotatable element driven by each dial and adapted to actuate each register, a lock for the dime register, means carried by one of the rotatable elements adapted to release the lock prior to actuating the register when the dime dial is actuated, means actuated by rotation of the penny register to release said dime register lock independently of said rotatable element, means operated by rotation of the penny register to actuate the dime register to receive a count from the penny register, means holding any signal in view position until any dial is next actuated, means limiting the return of the dial to normal and means automatically returning said dials to normal position.

208. In a device of the class described the combination with dials each having digits marked thereon and appropriated to dollars, dimes and pennies of an appropirate signal elevated by actuation of the dials, registers appropriated to dollars, dimes and pennies, a rotatable element driven by each dial and adapted to actuate each register, a lock for the dime register, means carried by one of the rotatable elements adapted to release the lock prior to actuating the register when the dime dial is actuated, means actuated by rotation of the penny register to release said dime register lock independently of said rotatable element, means operated by rotation of the penny register to actuate the dime register to receive a count from the penny register, means holding each signal in view position until a dial is next actuated, means limiting the return of the dial to normal, means automatically returning said dials to normal position, a centrifugal governor regulating the rapidity of the return of the dials and an audible signal operated by actuation of the dials.

209. In a device of the class described the combination with dials appropriated to dollars, dimes and pennies, means operated by each dial acting to independently actuate its respective register, means transferring a count from the dime register to the dollar register, means adapted to transfer a count to the dollar register from the dime and penny registers acting in combination and a register capable of being set back to 0, operatively and removably connected with the dollar register.

210. In a device of the class described the combination with dials appropriated to dollars, dimes and pennies, means operated by each dial acting to independently actuate its respective register, means transferring a count from the dime register to the dollar register, means adapted to transfer a count to the dollar register from the dime and penny registers actuating in combination, a register capable of being set back to 0 and receiving the count from the highest denomination register, means automatically throwing the same out of operative relation with said highest denomination register and means for manually setting said register back to 0.

211. Dials for a cash register embracing interfitting members, one rotatable within another and all having their faces flush and normally closed finger apertures in each dial.

212. Dials for cash registers embracing rotatable members, fitting in each other and all

having their front faces on the same plane said dials having finger apertures therein and spring pressed means for closing the apertures.

213. For a device of the class described dials rotatable one within another and all on the same plane, said dials adapted each for engagement with the fingers and independently rotatable.

214. In a device of the class described the combination with dials adapted for manual actuation, crown gears actuated by rotation thereof, register wheels, teeth pivoted thereto adapted to permit the teeth of the crown gear passing in one direction and engaged by the teeth on the crown gear when it is moving in the opposite direction and a total register to which all of the register wheels transfer.

215. In a device of the class described the combination with dials adapted for manual actuation of crown wheels, operative connections between the dials and crown wheels, registering wheels, teeth pivoted thereon locked from movement in one direction and engaged by the respective crown wheels, a total register and mechanism for registering the count singly from one of the register wheels thereto or from all of the register wheels acting conjointly.

216. In a device of the class described concentric shafts, a total register on one of the shafts, a high denomination register wheel on the same shaft, register wheels on the other shafts of different denominations, mechanism for actuating each register wheel to independently register and mechanism for transferring a count from one or all of the lower denomination register wheels acting singly or conjointly to the total register.

217. In a device of the class described the combination with concentric shafts, a total register on one of the shafts, a high denomination register wheel on the same shaft, register wheels on the other shaft of different denominations, mechanism for actuating each register wheel to independently register, mechanism for transferring a count from one or all of the lower denomination register wheels acting singly or conjointly to the total register, visible signals, an audible signal, mechanism for actuating the visible signal to view position, and to sound the audible signal and means for holding the visible signal in view position after the return of the actuating mechanism to normal.

218. In a cash register the combination with independently rotatable dials adapted for manual actuation and appropriated to money denominations, visible signals for any amount registrable, an audible signal, registers corresponding in number to the dials and each adapted to be independently actuated by its dial, a centrifugal governor operatively connected to control the rate of return movement of any or all of the dials and mechanism actuated by rotation of any dial to move to view position a visible signal corresponding to the amount registered and to sound the audible signal.

219. In a cash register, a plurality of independently rotatable dials having numerals marked thereon and "no sale" marked on one, signal tablets corresponding in number to the numeral stations and the "no sale" station on the dials and marked correspondingly, mechanism for shifting to view position the signal tablets characteristic of the transaction, oscillating means for holding the signals in view position until another dial is actuated and means releasing the same when the dials are next actuated.

220. In a device of the class described the combination with a plurality of shafts of a dial on each, pawl bars movable transversely of each shaft, means secured on the dial shafts for operating a pawl bar for each actuation of each dial, adjustable means for shifting all the other pawl bars out of operative position, visible signals operatively connected with the pawl bars, and one adjusted to view position for each dial actuated, means securing the signal in view position until a dial is next actuated and a plurality of registers independently connected with the respective dial shafts for registering the amount of the transaction.

221. In a device of the class described dial shafts, dials thereon appropriated to different money denominations, visible signals, operative mechanism between the same and dial shafts, an audible signal, a money drawer, a lock thereon, a shaft extending longitudinally the dial shafts, means adapted to partially rotate said shaft when any dial is actuated and mechanism operated by a partial rotation of said longitudinal shaft to sound the visible signal and unlock the money drawer.

222. In a cash register of the class described a plurality of dial shafts, dials thereon, appropriated to different money denominations, a shaft extending longitudinally of the machine, coacting cams secured on said shaft and the dial shafts, an audible signal, a money drawer, locking means therefor, mechanism operated by said longitudinal shaft, adapted to sound the signal and unlock the drawer, means automatically returning the signal sounding means and lock to normal position and visible signals corresponding to the amount of the transaction adjusted to view position after the audible signal has been sounded.

223. In a device of the class described the combination with dials appropriated to money denominations and marked with appropriate digits, of shafts connected therewith, audible signals for each dial, mechanism connected therewith operated by rotat-

ing the respective dials to adjust the appropriate signals to view position, a centrifugal governor, independent connections between each dial shaft and the governor adapting the governor to control the rate of movement of the dial shafts and means automatically returning the dials to normal.

224. In a device of the class described the combination with dial shafts arranged concentrically of a dial rigidly secured on each shaft, a series of pawl bars for each shaft, a series of visible signals for each series of pawl bars, a series of rotatable elements on each dial shaft adapted one to engage one of the pawl bars of its corresponding series upon each actuation of a dial or dials, thereby adjusting the appropriate signal to view position, adjustable supports operated to shift all pawl bars of a series except the one engaged by the rotatable element out of operative position and oscillating means for engaging the pawl bar engaged to the signal in view position.

225. In a device of the class described a plurality of dial shafts, dials secured thereto, rotatable elements secured on each shaft, independently movable pawl bars, adapted to be actuated by the rotatable elements, a swinging support normally supporting all the pawl bars, means for adjusting the height of the support, visible signals connected with the pawl bars, springs adapted to return the dials to normal after each actuation, means controlling the rate of movement of the dials and an audible signal operated by movement of the dials.

226. In a device of the class described the combination with a plurality of rotatable dials having digits marked thereon, of shafts therefor, a set of pawl bars for each dial, a set of signals operatively connected with each set of pawl bars, a plate between the signals and pawl bars, rotatable elements on each shaft, corresponding in number to the digits on the dials and adapted one to engage the appropriate pawl bar as the dial returns to normal position to elevate the signal to view position, means automatically operated by the pawl bar actuated to engage the same to hold the signal in view position, means automatically releasing said engaging means prior to again adjusting a signal to view position and means automatically returning the signal to normal.

227. In a device of the class described the combination with dials marked with digits to represent different money denominations and a "no sale" station, visible signals equal in number to the digit and "no sale" stations on the dials, mechanism operating to view position a signal or signals corresponding to the transaction, an audible signal apparatus, means for sounding the same for each actuation of one or more dials, independent register shafts and registers appropriated to the different denominations of the dials secured thereon, each independently operated by rotation of its corresponding dial.

228. In a device of the class described the combination with dials marked with digits to represent different monev denominations and a "no sale" station, visible signals equal in number to the digit and "no sale" stations on the dials, mechanism operating to view position a signal or signals, corresponding to the transaction, an audible signal apparatus, means for sounding the same for each actuation of one or more dials, independent register shafts, registers appropriated to the different denominations of the dials secured thereon, each independently operated by rotation of its corresponding dial, mechanism locking the registers from rotation in a direction reverse to that in counting, mechanism for locking all the higher denominations registers from movement in its direction of counting and mechanisms shifting the last named locking means out of operative relation prior to a transfer of a count from a lower denomination register thereto.

229. In a device of the class described the combination with dials of shafts therefor, visible signals operated by rotation of the dials to view position, an audible signal sounded by rotation of the dials, a centrifugal governor controlling the rate of movement of the dials, registers corresponding to the number of dials and operated by movement of the dials, mechanism locking part of the registers from movement in both directions and mechanism releasing part of the locking mechanism prior to registering the amount of the transaction.

230. In a device of the class described the combination with dials appropriated to money values, dial shafts, a gear on each, visible signals, an audible signal, a money drawer, a lock therefor, mechanism operated by the rotation of any or all of the dials to operate appropriate visible signals, the audible signal and unlock the money drawer, a governor shaft, a governor thereon, a shaft extending parallel with the governor shaft, intermeshing gears thereon and mechanisms operatively connecting each dial shaft with the parallel shaft, each embracing a gear intermeshing with the gear on the dial shafts, a ratchet secured on the parallel shaft and a pawl rotatable with said gear adapted to engage the ratchet.

231. In a device of the class described the combination with dials appropriated to money denominations and marked correspondingly, of shafts operated thereby, rotatable elements on each shaft, means spacing the same appropriate distances apart, visible signals marked to correspond

with the digits on the dials, means connected therewith operated by the rotatable elements to throw to view positions a signal corresponding to the amount of the transaction, means holding the signal in view position for a period and coacting cams for releasing the signals prior to adjusting another signal or signals to view position.

232. In a device of the class described the combination with dials of shafts secured thereto, visible signals, mechanism for adjusting the appropriate signal to view position as the dials return to normal position, standards adjacent the shafts, a spring on each standard connected to return the dial to normal, a pair of movable stops carried by each shaft adapted at the limits of movement of the dials to contact the standards, means carried by each shaft to release the signal from view position as a dial is next operated and a stop limiting the downward movement of the dials for all positions intermediate the extreme downward rotations.

233. In a device of the class described the combination with dials of shafts secured thereto, visible signals, mechanism for adjusting the appropriate signal to view position as the dial returns to normal position, standards adjacent the shafts, a spring on each standard connected to return its dial to normal, a pair of removable stops carried by each shaft adapted at the limits of movement of the dials to contact the standards, means carried by each shaft to release the signal from view position as a dial is next operated and a stop limiting the downward movement of the dials for all positions intermediate the extreme downward rotations.

234. Dials for cash registers embracing interfitting plates having normally closed finger apertures therein.

235. Dials for cash registers embracing interfitting plates having normally closed finger apertures therein and means resisting insertion of the fingers into said apertures.

236. In a cash register concentric interfitting dials having finger apertures therein and means for closing said apertures.

237. In a cash register interfitting dials having finger apertures therein, means for closing said apertures and means for resisting opening of said apertures and adapted to automatically return the closing means to normal after opening.

238. Concentric interfitting dials having finger sockets therein, buttons adapted to close the sockets and springs interposed between the buttons and bottom wall of the sockets.

239. In a cash register a plurality of concentric interfitting dials arranged in the same vertical plane and provided with axial finger sockets.

240. In a cash register interfitting dials having axial sockets therein to receive the fingers and numerals indicating said sockets.

241. In a cash register interfitting, concentric dials having sockets therein, said dials having their exposed faces flush, means in said sockets normally flush with the exposed faces of the dials and means permitting said means being forced inwardly by the fingers for rotating the dials.

242. In a cash register concentric, interfitting dials provided with sockets for receiving the fingers and a hub connected with each dial.

243. In a cash register concentric dials, shafts therefor, wheels on said shafts having teeth integral therewith, normally concealed visible signal tablets, means connected with said tablets having teeth adapted to be engaged by the teeth of the wheels for adjusting each visible signal tablet to view position at the proper time.

244. In a cash register concentric dials, shafts therefor, wheels on said shafts having teeth integral therewith, normally concealed visible signal tablets, means connected with said tablets having teeth adapted to be engaged by the teeth of the wheels for adjusting each visible signal tablet to view position at the proper time, swinging means for holding each signal in view position and means for actuating said swinging means to release the visible signals.

245. In a device of the class described a plurality of interfitting dials arranged in the same vertical plane, wheels rotatable therewith having integral teeth, tablets having numerals thereon, members actuated by the teeth on said wheels for operating said tablets, means for holding said members after one or more tablets have been operated, and means releasing the tablets prior to operating other tablets.

246. In a device of the class described a plurality of dials adapted for engagement by the fingers, wheels rotatable therewith having integral teeth, tablets having numerals thereon, means actuated by the teeth on said wheels for operating said tablets, means for holding said means after one or more tablets have been operated, means releasing the tablets prior to operating other tablets and means for automatically returning the tablet operating means to normal after release of the tablets.

247. In a cash register a plurality of rotatable elements, bars corresponding in number therewith each adapted to be moved by the appropriate element, tablets, one adjusted to view position by movement of each bar in one direction, means returning the actuated bars to normal and means limiting the movement of said bars in both directions.

248. In a device of the class described a plurality of view tablets marked with nu-

merals, bars operatively connected to adjust said tablets individually and to adjust a plurality of tablets simultaneously to view position, means adapted to engage said bars, said means and bars having coacting cam faces whereby the bars automatically adjust said means to engage the same and means for actuating the bars individually and adjusting a plurality of the bars simultaneously.

249. In a device of the class described a plurality of view tablets, marked with numerals, bars operatively connected to adjust said tablets individually and to adjust a plurality of tablets simultaneously to view position, means adapted to engage said bars, means and bars having coacting cam faces whereby the bars automatically adjust said means to engage the same, means for actuating the bars individually and adjusting a plurality of the bars simultaneously and an adjustable support for all bars that are not actuated.

250. In a device of the class described interfitting dials having digits marked thereon adapted for individual actuation and simultaneous actuation by the fingers engaging in sockets in the dials, tablets marked with digits corresponding to those on the dials, operative mechanism between the dials and tablets for shifting one or more tablets to view position, a plate interposed between the tablets and part of the operating mechanism, means for locking the tablets when shifted to view position and means adapted to limit the movement of said locking means.

251. In a device of the class described interfitting solid dials having their outer faces in the same plane, visible tablets, pawl bars, means connecting the tablets and pawl bars, a tooth on each pawl bar and rotatable elements actuated by the dials for engaging the teeth of the pawl bars for shifting the appropriate tablet or tablets to view position.

252. In a device of the class described interfitting solid dials having their outer faces in the same plane, visible tablets, pawls bars, means connecting the tablets and pawl bars, a tooth on each pawl bar, rotatable elements actuated by the dials for engaging the teeth of the pawl bars for shifting the appropriate tablet or tablets to view position, teeth integral with the pawl bars having rounded faces and springs having rounded ends adapted to contact the rounded faces of the last named teeth for adjusting the springs to engage the teeth to hold the shifted tablet or tablets in view position.

253. In a device of the class described interfitting solid dials having their outer faces in the same plane, visible tablets, pawl bars, means connecting the tablets and pawl bars, a tooth on each pawl bar, rotatable elements actuated by the dials for engaging the teeth of the pawl bars for shifting the appropriate tablet or tablets to view position, a shoulder adjacent said tooth and a rounded notch adjacent the shoulder and each pawl bar having a downwardly inclined face from the rounded notch to the adjacent end and a standard provided with a rounded top adapted to normally engage in the rounded notches in the pawl bars and the standard adapted to elevate all pawl bars for the teeth to clear all rotatable elements except those adjusting the signals to view position.

254. In a cash register a plurality of interfitting dials appropriated to different money denominations and all adapted to be operated with one hand at one operation, rotatable elements operated by said dials, reciprocating elements actuated by said rotatable elements, tablets actuated by the reciprocating elements to indicate the amount of the transaction and means adapted to engage each reciprocatable element when actuated to secure the tablets in view position.

255. In a cash register a plurality of interfitting dials appropriated to different money denominations and all adapted to be operated with one hand at one operation, rotatable elements operated by said dials, reciprocating elements actuated by said rotatable elements, tablets actuated by the reciprocating elements to indicate the amount of the transaction, means adapted to engage each reciprocatable element when actuated to secure the tablets in view position, an audible signal and means operated by the dials to sound the signal.

256. In a cash register a plurality of interfitting dials appropriated to different money denominations and all adapted to be operated with one hand at one operation, rotatable elements operated by said dials, reciprocating elements actuated by said rotatable elements, tablets actuated by the reciprocating elements to indicate the amount of the transaction, means adapted to engage each reciprocatable element when actuated to secure the tablets in view position, a bell, a money drawer, a lock therefor, a rock shaft, means rotatable with said rotatable elements for operating said shaft and mechanisms operated from the rock shaft for ringing the bell and unlocking the drawer.

257. In a device of the class described rotatable elements adapted for engagement by the fingers, shafts actuated by said elements, cams on said shafts, bars above said cams having projections integral therewith provided with cam faces on one side to permit the cams passing thereunder and adapted on the opposite side to engage the cams thereby adapting the cams to shift the appropriate bars and visible signals connected with the

appropriate bars and adjusted to view position thereby.

258. In a device of the class described rotatable elements adapted for engagement by the fingers, shafts actuated by said elements, cams on said shaft, bars above said cams having projections integral therewith provided with cam faces on one side to permit the cams passing thereunder and adapted on the opposite side to engage the cams thereby adapting the cams to shift the appropriate bars, visible signals connected with the appropriate bars and adjusted to view position thereby, an audible signal at the rear of the device, a drawer, locking means at the rear of the machine, a shaft adapted to be actuated by any or all of said dials and mechanism operated by said shaft for sounding the audible signal and opening the drawer.

259. In a cash register dials, shafts actuated thereby, a shaft extending parallel with said dial shafts, means for actuating said shaft from any dial shaft, a money drawer, mechanism for locking the same, an audible signal and means operated by the second named shaft for unlocking the drawer and sounding the audible signal.

260. In a cash register dials, shafts actuated thereby, a shaft extending parallel with said dial shafts, means for actuating said shaft from any dial shaft, a money drawer, mechanism for locking the same, an audible signal, means operated by the second named shaft for unlocking the drawer and sounding the audible signal, means for automatically returning the locking mechanism to again engage the drawer and means adapted to return the sounding mechanism to again sound the audible signal.

261. In a cash register a money drawer, a locking bolt therefor, an audible signal, dials adapted any or all to be operated by a single sweep of the hand, a shaft operated by movement of any or all of said dials and mechanisms actuated by the shaft for retracting the locking bolt and releasing the signal sounding means.

262. In a cash register a money drawer, a locking bolt therefor, an audible signal, dials adapted any or all to be operated by a single sweep of the hand, a shaft operated by movement of any or all of said dials, mechanisms actuated by the shaft for retracting the locking bolt and releasing the signal sounding means and means for automatically returning the locking bolt, sounding means and shaft to normal position.

263. In a cash register shafts of different lengths having a common axis, dials, one for each shaft, a shaft extending longitudinally the aforesaid shafts, rigid arms secured on said shaft corresponding in number to the number of dial shafts, means rotatable with each dial shaft for engaging the appropriate arm and rotating the longitudinal shaft as the dials rotate in one direction, said means adapted to yield to pass the arms without rotating said shaft as the dials rotate in the opposite direction, a money drawer, means for locking the same, an audible signal and mechanism operated by said longitudinal shaft for actuating the audible signal and unlocking the drawer.

264. In a cash register shafts of different lengths having a common axis, dials, one for each shaft, a shaft extending longitudinally the aforesaid shafts, rigid arms secured on said shaft corresponding in number to the number of dial shafts, means rotatable with each dial shaft for engaging the appropriate arm and rotating the longitudinal shaft as the dials rotate in one direction, said means adapted to yield to pass the arms without rotating said shaft as the dials rotate in the opposite direction, a money drawer, means for locking the same, an audible signal, mechanism operated by said longitudinal shaft for actuating the audible signal and unlocking the drawer and means for automatically returning all of the operating mechanisms, shafts and dials to normal after the dials have been manually actuated.

265. In a cash register dials, dial shafts of different lengths having a common axis and one rigidly connected with each dial, visible signals, mechanism operated by the dials for actuating the proper signal or signals to view position, a shaft, means rotated by the dial shafts for rotating said last named shaft when the dials rotate in one direction, an audible signal actuated by rotation of the second named shaft and a money drawer unlocked by rotation of said second named shaft.

266. In a cash register dials, dial shafts adapted to be rotated thereby, a gear on each dial shaft, visibile signals, mechanism operated by rotation of the dials for adjusting the visible signals to view position, standards, one for each dial shaft, a short shaft journaled in each standard, a gear on one end of each shaft adapted to mesh with the appropriate gear on the dial shafts and a spring on the opposite end of each short shaft adapted to return the dials and dial shafts to normal after each manual actuation.

267. In a cash register dials, dial shafts adapted to be rotated thereby, a gear on each dial shaft, visible signals, mechanism operated by rotation of the dials for adjusting the visible signals to view position, standards, one for each dial shaft, a short shaft journaled in each standard, a gear on one end of each shaft adapted to mesh with the appropriate gear on the dial shafts, a spring on the opposite end of each short

shaft adapted to return the dials and dial shafts to normal after each manual actuation and regulable means for governing the rate of movement of said dials and shafts in returning to normal.

268. In a cash register dial shafts of different lengths having a common axis, dials adapted to be engaged by the fingers for rotating the shafts in one direction and an independent mechanism for returning each shaft to normal comprising a standard, a short shaft journaled therein, intermeshing gears on said shaft and the appropriate dial shaft, and a spring secured at one end to the shaft and at its opposite end to the standard.

269. In a cash register dial shafts of different lengths having a common axis, dials adapted to be engaged by the fingers for rotating the shafts in one direction and an independent mechanism for returning each shaft to normal comprising a standard, a short shaft journaled therein, intermeshing gears on said shaft and the appropriate dial shaft, a spring secured at one end to the shaft and at its opposite end to the standard, a ratchet shaft extending longitudinally of the short shaft, gears on said shaft corresponding in number to the number of short shafts and intermeshing with the gears on the appropriate short shaft, a pawl rotatable with each gear on the ratchet shaft, a ratchet engaged by each pawl when the pawl is rotating in one direction whereby the shaft is rotated, a governor shaft actuated by rotation of the ratchet shaft, a centrifugal governor thereon and means for adjusting the governing power of the governor.

270. In a cash register dial shafts of different lengths having a common axis, dials adapted to be engaged by the fingers for rotating the shafts in one direction and an independent mechanism for returning each shaft to normal comprising a standard, a short shaft journaled therein, intermeshing gears on said shaft and the appropriate dial shaft, a spring secured at one end to the shaft and at its opposite end to the standard, means regulating the rate of return of the dials and shafts to normal and a visible signal adjusted to view position as the dials return to normal corresponding to the amount registered.

271. In a cash register dials of different sizes appropriated to money denominations, tablets marked correspondingly and pivoted to swing to view position, mechanisms operated by the dials as they rotate in one direction for swinging the tablets corresponding to the sum registered to view position and a governor also actuated by the dials as they rotate to adjust the tablets to view position.

272. In a cash register dials of different sizes appropriated to money denominations, tablets marked correspondingly and pivoted to swing to view position, mechanisms operated by the dials as they rotate in one direction for swinging the tablets corresponding to the sum registered to view position, a governor also actuated by the dials as they rotate to adjust the tablets to view position and a plurality of internal stops for each dial controlling the limit of movement of their respective dials in each direction.

273. In a cash register dials of different sizes appropriated to money denominations, tablets marked correspondingly and pivoted to swing to view position, mechanisms operated by the dials as they rotate in one direction for swinging the tablets corresponding to the sum registered to view position, a governor also actuated by the dials as they rotate to adjust the tablets to view position, a plurality of internal stops for each dial controlling the limit of movement of their respective dials in each direction, and an external stop for limiting the movement of the dials in making all registrations between the limits of movement of the same.

274. In a cash register the combination with dials of different sizes of shafts of different lengths secured thereto, an independent mechanism for automatically returning each dial to normal after actuation thereof, adjustable standards pivoted on one side of the shafts, bars supported at one end on said standards, means actuated by the dials for engaging one or more bars and moving the same longitudinally, said standard adapted to swing as the engaged bars move to adjust the other bars out of engaging position and tablets connected with the bars and adapted to be adjusted as the bars are moved.

275. In a device of the class described rotatable actuating mechanism, reciprocating mechanism actuated thereby, visible signals adapted for adjustment by the reciprocating mechanism, means limiting the movement of the reciprocating mechanism and stops limiting the movement of the rotating mechanism.

276. In a device of the class described rotatable actuating mechanism, reciprocating mechanism actuated thereby, visible signals adapted for adjustment by the reciprocating mechanism, means limiting the movement of the reciprocating mechanism, stops limiting the movement of the rotating mechanism and a centrifugal governor controlling the rate of movement of the various mechanisms.

277. In a device of the class described rotatable actuating mechanism, reciprocating mechanism actuated thereby, visible signals adapted for adjustment by the reciprocating mechanism, means limiting the movement of the reciprocating mechanism, stops limiting the movement of the rotating mechanism, a

centrifugal governor controlling the rate of movement of the various mechanisms, an audible signal, a money drawer, means for locking the same and mechanism actuated by the rotatable mechanism for sounding the audible signal and opening the money drawer.

278. In a cash register dials adapted for rotation for registering the amount of the transaction, visible signals adapted for adjustment by rotation of the dials, means for locking one or all of the dials from movement and external and internal stops for limiting the rotation of the dials in both directions.

279. In a cash register dials adapted for rotation for registering the amount of the transaction, visible signals adapted for adjustment by rotation of the dials, means for locking one or all of the dials from movement, external and internal stops for limiting the rotation of the dials in both directions, independent mechanisms for returning the dials to normal and means controlling the speed of the dials when turning to normal.

280. In a cash register a plurality of interfitting dials adapted for rotation singly or simultaneously, a plurality of cams rotatable with the dials, pawl bars actuated by said cams, signals actuated to view position by the pawl bars, a plate between the signals and pawl bars, a swinging frame, spring detents supported by the frame, adapted to engage the pawl bars to hold the signals in view position and means for actuating the frame to release the detents from the pawl bars to permit the signals returning to normal.

281. In a cash register a plurality of interfitting dials adapted for rotation singly or simultaneously, a plurality of cams rotatable with the dials, pawl bars actuated by said cams, signals actuated to view position by the pawl bars, a plate between the signals and pawl bars, a swinging frame, spring detents supported by the frame adapted to engage the pawl bars to hold the signals in view position, means for actuating the frame to release the detents from the pawl bars to permit the signals returning to normal, means secured to the frame adapted to engage the plate to limit the movement of the detents in one direction and a spring between the plate and detents for automatically returning the detents to normal to again engage a pawl bar.

282. In a device of the class described the combination with rotative dials of shafts secured thereto, pawl bars, means on the shafts for engaging the pawl bars singly and shifting one or more, visible signals operated by the pawl bars, pivotally supported arms, a bar connecting said arms, pivotally supported means resting on said bar adapted to engage the shifted pawl bar to hold the signal in view position, arms extending outwardly from said bar, pawls pivoted thereto, means carried by each dial shaft for engaging the appropriate pawl to adjust the bar thereby adjusting the detent to release the pawl bar permitting the signal to return to normal and a spring for returning the detents to normal.

283. A cash register embracing dials, shafts rigidly connected therewith, visible signal tablets, a slotted plate, levers secured to the signal tablets extending through the slots in the plate and guided in their movements thereby, pawl bars connected with the levers, a plate having slots therein to receive and guide the pawl bars and means actuated by rotation of the dials for actuating the pawl bars.

284. A cash register embracing dials, shafts rigidly connected therewith, visible signal tablets, a slotted plate, levers secured to the signal tablets extending through the slots in the plate and guided in their movements thereby, pawl bars connected with the levers, a plate having slots therein to receive and guide the pawl bars, means actuated by rotation of the dials for actuating the pawl bars, means engaging and holding an actuated pawl bar with its visible signal in view position and means limiting the movement of the pawl bars.

285. In a cash register the combination with rotatable concentric dials appropriated to different money denominations, signals normally concealed, operative mechanism between the signals and dials whereby rotation of the dials selectively shifts the signals to view position, and registering wheels equal in number to the dials.

286. In a cash register the combination with rotatable concentric interfitting dials appropriated to different money denominations, visible signals marked correspondingly, mechanisms actuated by the dials for selectively adjusting the visible signals corresponding to the amount of the transaction to view position, and independent registering mechanisms appropriated to different money denominations operatively connected with and actuated by rotation of its corresponding dial for registering the amount of successive transactions.

287. In a cash register the combination with rotatable dials appropriated to different money denominations, visible signals marked correspondingly, mechanisms actuated by the dials for adjusting visible signals corresponding to the amount of the transaction to view position, independent registering mechanisms appropriated to different money denominations, operatively connected with and actuated by rotation of its corresponding dial for registering the amount of successive transactions and alter-

nate registering mechanisms adapted to register only when moving oppositely.

288. In a cash register the combination with rotatable dials appropriated to different money denominations, visible signals marked correspondingly, mechanisms actuated by the dials for adjusting visible signals corresponding to the amount of the transaction to view position, independent registering mechanisms appropriated to different money denominations operatively connected with and actuated by rotation of its corresponding dial for registering the amount of successive transactions, alternate registering mechanisms adapted to register only when moving oppositely and mechanism adapted to transfer a count equal to one count of the highest denomination register thereto from all lower denomination registers acting conjointly.

289. A cash register embracing in combination visible signals, an audible signal, a money drawer, locking means for said drawer, rotative dials appropriated to different money denominations, mechanisms actuated wholly by rotation of the dials for adjusting the appropriate visible signal or signals to view position, sounding the audible signal and unlocking the money drawer, independent registering devices, one for each money denomination and independent connections between each dial and registering devices of the same denomination for actuating said registering device by rotation of the corresponding dial.

290. A cash register embracing in combination visible signals, an audible signal, a money drawer, locking means for said drawer, rotative dials appropriated to different money denominations, mechanisms actuated wholly by rotation of the dials for adjusting the appropriate visible signal or signals to view position, sounding the audible signal and unlocking the money drawer, independent registering devices, one for each money denomination, independent connections between each dial and registering device of the same denomination for actuating said registering device by rotation of the corresponding dial, and means locking each registering device from movement in a reverse direction to its registering direction.

291. A cash register embracing in combination visible signals, an audible signal, a money drawer, locking means for said drawer, rotative dials appropriated to different money denominations, mechanisms actuated wholly by rotation of the dials for adjusting the appropriate visible signal or signals to view position, sounding the audible signal and unlocking the money drawer, independent registering devices, one for each money denomination, independent connections between each dial and registering device of the same denomination for actuating said registering device by rotation of the corresponding dial, means locking each registering device from movement in a reverse direction to its registering direction and mechanism adapted to transfer a count from each lower to each higher denomination register.

292. A cash register embracing in combination visible signals, an audible signal, a money drawer, locking means for said drawer, rotative dials appropriated to different money denominations, mechanisms actuated wholly by rotation of the dials for adjusting the appropriate visible signal or signals to view position, sounding the audible signal and unlocking the money drawer, independent registering devices, one for each money denomination, independent connections between each dial and registering device of the same denomination for actuating said registering device by rotation of the corresponding dial, means locking each registering device from movement in a reverse direction to its registering direction and mechanisms adapted to transfer a count from all the lower denomination registering devices to the highest denomination registering device when the combined count on all of said lower denomination registering devices equals one count for the highest denomination register.

293. A total adding cash register embracing in combination an audible signal, visible signals, a money drawer, dials adapted by rotation thereof to sound the audible signal, release the money drawer and adjust the visible signals to view position, rotative registering wheels, each connected with the appropriate dial and actuated by rotation of the dials to register the amount of the transaction, a total adding device, means connecting the highest denomination registering wheel to register directly thereto and mechanism for transferring a count from all the lower denomination register wheels to the total adding device when their combined registered sum equals a count of one for said total adding device.

294. In a total adding cash register of the class described the combination with an audible signal, a money drawer, visible signals, dials appropriated to different money denominations adapted by rotation thereof to sound the audible signal, release the money drawer and adjust the visible signals to view position in the order named, a plurality of registering wheels, one for each dial and operated by rotation of its respective dial to register the amount of each transaction, a total adding register and means directly connecting the highest denomination register wheel with the total adding register.

295. In a total adding cash register of the class described the combination with an

audible signal, a money drawer, visible signals, dials appropriated to different money denominations adapted by rotation thereof to sound the audible signal, release the money drawer and adjust the visible signals to view position in the order named, a plurality of registering wheels, one for each dial and operated by rotation of its respective dial to register the amount of each transaction, means directly connecting the highest denomination register wheel with the total adding register, mechanism adapted to transfer to the total adding register a count from one of the lower denomination register wheels or all lower denomination register wheels acting conjointly.

296. In a total adding cash register the combination with a plurality of interfitting dials adapted for independent and simultaneous rotation and appropriated to money denominations, an audible signal, visible signals, mechanisms operated by any dial to sound the audible signal and shift the appropriate visible signal or signals to view position, registers, one for each dial, independent mechanism between each dial and its register for registering the amount of the transaction when the dial is rotated, a total adding register operated by rotation of the highest denomination dial and register, and mechanism independent from the mechanism between the high denomination dial and register for transferring a count from the lower denomination registers to the total adding register.

297. In a cash register the combination with dials adapted for manual actuation each appropriated to a money denomination and marked with numerals, a total adding register, a highest denomination register connected directly therewith adapted to rotate the same in registering, mechanism actuated by rotation of the highest denomination dial for rotating said highest denomination register, registers, one for each lower denomination dial and rotated by actuation of the respective dial for registering the amount of the transaction and mechanism adapted to actuate the highest denomination register when the registered sum of one of the lower denomination registers equals a count for the total register.

298. In a cash register the combination with dials adapted for manual actuation each appropriated to a money denomination and marked with numerals, a total adding register, a highest denomination register connected directly therewith adapted to rotate the same in registering, mechanism actuated by rotation of the highest denomination dial for rotating said highest denomination register, registers, one for each lower denomination dial and rotated by actuation of the respective dial for registering the amount of the transaction, mechanism adapted to actuate the highest denomination register when the registered sum on one of the lower denomination registers or the registered sum on all lower denomination registers equals a count for the total register and means actuated by rotation of the dials for actuating said mechanism.

299. In a device of the class described the combination with rotatable dials appropriated to dollars, dimes and cents, register wheels appropriated to dollars, dimes and cents, mechanism rotating each register wheel when its corresponding dial is rotated to register the amount of the transaction, a total registering device and mechanism registering on said total registering device each dollar as registered on the dollar register wheel.

300. In a device of the class described the combination with rotatable dials appropriated to dollars, dimes and cents, register wheels appropriated to dollars, dimes and cents, mechanism rotating each register wheel when its corresponding dial is rotated to register the amount of the transaction, a total registering device, mechanism registering on said total registering device each dollar as registered on the dollar register wheel, mechanism locking each register wheel from rotating in a direction reverse to its registering rotation and mechanism locking all of the register wheels from rotating in their registering direction except the lowest denomination register wheel.

301. In a device of the class described the combination with rotatable dials appropriated to dollars, dimes and cents, register wheels appropriated to dollars, dimes and cents, mechanism rotating each register wheel when its corresponding dial is rotated to register the amount of the transaction, a total registering device, mechanism registering on said total registering device each dollar as registered on the dollar register wheel, mechanism locking each register wheel from rotating in a direction reverse to its registering rotation, mechanism locking all of the register wheels from rotating in their registering direction except the lowest denomination register wheel and mechanism for releasing the last named locking mechanism as the dials are rotating and prior to the rotation of the register wheels to register the amount of the transaction.

302. In a device of the class described the combination with rotatable dials appropriated to dollars, dimes and cents, register wheels appropriated to dollars, dimes and cents, mechanism rotating each register wheel when its corresponding dial is rotated to register the amount of the transaction, a total registering device, mechanism registering on said total registering device each dollar as registered on the dollar regis-

ter wheel, mechanism for transferring a count from each lower denomination register wheel to the adjacent higher denomination register wheel and mechanisms for transferring a count from a plurality of the lower denomination registers to the total register when the combined registered sum of said plurality of registers equals a count for said total register.

303. In a cash register the combination with rotative dollar, dime, and penny dials, rotative dollar, dime and penny register wheels, rotative means actuating the register wheels when its corresponding dial is rotated, a total register, mechanism for transferring a count from the penny register wheel to the dime register wheel, pivoted mechanism normally elevated, means rotatable with the dime register wheel for lowering said pivoted mechanism just prior to the dime register wheel completing a revolution, means engaged to the pivoted mechanism for rotating the dollar register wheel and means for actuating the pivoted mechanism thereby actuating the dollar register wheel as the dime register wheel completes each revolution.

304. In a device of the class described the combination with rotative registers appropriated to dollars, dimes and cents, dials appropriated to dollars, dimes and cents and marked with the significant digits, a total register actuated by the dollar register, means normally locking the dime register from advance rotation, means releasing said locking means prior to a transfer of a count from the cent to the dime dial and mechanism transferring the count from the cent to the dime dial while said locking mechanism is released.

305. In a device of the class described the combination with rotative registers appropriated to dollars, dimes and cents, dials appropriated to dollars, dimes and cents and marked with the significant digits, a total register actuated by the dollar register, means normally locking the dime register from advance rotation, means releasing said locking means prior to a transfer of a count from the cent to the dime dial, mechanism transferring the count from the cent to the dime dial while said locking mechanism is released, an arm rotatable with the dime register, oscillating means actuated by said arm, means for actuating the oscillating means when the sum registered on the dime register equals a count on the total register to actuate said total register to make the count.

306. In a device of the class described the combination with rotative registers appropriated to dollars, dimes and cents, dials appropriated to dollars, dimes and cents and marked with the significant digits, a total register actuated by the dollar register, means normally locking the dime register from advance rotation, means releasing said locking means prior to a transfer of a count from the cent to the dime dial, mechanism transferring the count from the cent to the dime dial while said locking mechanism is released, means for transferring a count from the dime to the dollar register and mechanism for transferring a count to the dollar register when the combined sum of the dime and cent register equals a count on said dollar register.

307. A cash register embracing the combination with rotative elements for manual actuation, rotative registers appropriated to different money denominations, rotative transferring elements actuating the registers by rotation of the manually operatable elements and mechanisms for transferring a count independently from a lower denomination register to the highest and also from a plurality of lower denomination registers acting conjointly.

308. In a device of the class described the combination with a plurality of concentrically mounted interfitting rotative dials, one graduated at its periphery to indicate sales of low denominations and another to indicate sales of higher denominations, of axially alined shafts on said dials, a register, means on said shafts adapted to operate the register, toothed disks on said shafts and means operated by said disks adapted to visibly display the amount of the purchase.

309. In a device of the class described the combination with a plurality of rotative dials, of a shaft on each dial, one of said shafts being rotative within the other, a register operatively connected with said shafts, a plurality of toothed disks on said shafts and tablets adapted to be raised by said teeth into view position.

310. In a device of the class described the combination with a plurality of rotative dials, one graduated to indicate low denominations and the other higher denominations, a rotative shaft on each dial, a plurality of disks thereon, a tooth on each disk and arranged successively to correspond with successive graduations on the dial, bell crank levers pivoted above the disks, a bar connected with each lever and extending over the disks in position to be engaged by the teeth, means adapted to elevate the remaining bars out of engagement with the teeth when one of the dials is engaged by a tooth and a tablet on each lever.

311. In a device of the class described the combination with a casing, of a graduated cent dial and a dollar dial rotatable thereon in a plane parallel with the front of the casing, a tubular shaft on one of said dials, a shaft on the other extending through said tubular shaft, a dollar registering mechanism, means on each shaft adapted to

operate said registers, a plurality of tooth disks on said shaft, a plurality of pivotally supported tablets and means operated by said disks to selectively elevate said tablets to view position.

312. In a rotatably operated cash register the combination with one or more laterally rotatable dials adapted to be manually actuated, a register operated thereby insuring total sales, pivoted tablets marked one for each sale, registerable at one operation, and dial cash levers actuated from the dials acting to elevate into view selectively the tablet appropriate the sale recorded.

313. In a device of the class described the combination with comprising concentrically mounted interfitting rotative dials appropriated to money denominations, a register, an independent mechanism transferring the count from each dial to said register, visible signals, mechanism adapted to elevate to view position a signal or signals representing each sale, means securing the same in view position until the next sale is register, and means adapted to elevate the securing means permitting the elevating mechanism and signal to return to normal position by gravity.

314. A device of the class described the combination with a casing, concentric shafts journaled therein, a dial rigidly secured on each, a dollar register, mechanisms actuated by one of said dials to register the sales less than a dollar, means transferring each count of a dollar therefrom to the dollar register, an oscillating lever, means on one of said shafts adapted to actuate the same, and reciprocating mechanism actuated by each oscillation of said lever to transfer a count to the dollar register.

315. A device of the class described the combination with a casing, concentric shafts journaled therein, a dial rigidly secured on each, a dollar register, mechanisms actuated by one of said dials to register the sales less than a dollar, means transferring each count of a dollar therefrom to the dollar register, an oscillating lever, means on one of said shafts adapted to oscillate the same, reciprocating mechanism actuated by each oscillation of said lever to transfer a count to the dollar register, a visible signal elevated by movement of any dial, and an audible signal corresponding to the amount of the sale actuated by movement of any of said dials.

316. In a device of the class described the combination with concentric shafts, dials thereon appropriated to money denominations, a register, mechanism transferring the count from the dials to the register, wheels on each shaft, a tooth on each wheel, tablets for each transaction registerable and "no sale," bars corresponding to the number of tablets having pivotal connection therewith, teeth on said bars positioned to be engaged by the teeth on the appropriate wheel, means supporting the free end of said bars and adapted to automatically elevate all of the bars to move the keys out of operative relation except the bar or bars connected to the tablets corresponding to the transaction registered.

317. In a device of the class described the combination with concentric shafts, dials thereon appropriated to money denominations, a register, mechanism transferring the count from the dials to the register, wheels on each shaft, a tooth on each wheel, tablets for each transaction registerable, and "no sale," bars corresponding to the number of tablets having pivotal connection therewith, teeth on said bars positioned to be engaged by the tooth of the appropriate wheel, means supporting the free end of said bars and adapted to automatically elevate all of the bars to move the teeth out of operative relation except the bar or bars connected to the tablets corresponding to the transaction registered, means engaging the bar or bars connected to the elevated tablets to hold the same in view position, and levers secured to the dial shafts to release the bars permitting return of the bars to normal when the dials are next actuated.

318. In a cash register the combination with rotatable actuating dials, a registering mechanism rotatable with one dial, a mechanism adapted to be operated by the return of one of the dials to normal, a total adding register adapted to be operated by said mechanism, wheels rotatable with the dials, each wheel having one tooth, and an indicating mechanism for each tooth adapted to be set to indicating position by the tooth.

319. In a cash register the combination with rotatable actuating dials, a registering mechanism rotatable with one dial, a mechanism adapted to be operated by the return of one of the dials, a total adding register adapted to be operated by said mechanism, wheels rotatable with the dials, each wheel having one tooth, an indicating mechanism for each tooth adapted to be set to indicating position by the tooth, a member adapted to support any of the indicating mechanisms for the same dial in indicating position, and means rotatable with each dial for actuating the member when rotating in one direction, and passing said member without actuating the same when rotating oppositely.

320. In a device of the class described the combination with registering mechanisms, of different denominations, concentric dials adapted to rotate together, two dials adapted to actuate the registering mechanism on the forward rotation and the other on the return rotation of the dials, indicating tablets, each connected to be operated by the rotation of the respective dial when the dials return to normal, and mechanism operated

by forward rotation of the dials to release all tablets held in indicating position to indicate the amount of the preceding transaction.

321. In a cash register the combination with a plurality of registering mechanisms, dials connected to rotate some of said mechanisms, when rotating forwardly, a dial connected to rotate the other registering mechanism when rotating reversely from its forward rotation, indicating tablets, an oscillating tooth bar connected with each, toothed wheels, one for each bar adapted to engage the bar and actuate the same to elevate the respective tablet, a vertically swinging member, and a tooth on each bar adapted to said swinging member to hold the tablet elevated.

322. In a cash register the combination with a plurality of registering mechanisms, dials connected to rotate one of said mechanisms when rotating forwardly, a dial connected to rotate the other registering mechanism when rotating reversely from its forward rotation, indicating tablets, an oscillating tooth bar connected with each, toothed wheels, one for each bar adapted to engage the bar and actuate the same to elevate the respective tablets, a vertically swinging member, a tooth on each bar adapted to engage said swinging member to hold the tablet elevated, and means operated by rotation of the dial for actuating the swinging member to clear the teeth, and thereby permit the tablet and actuating bar to return to normal.

323. In a cash register actuating dials, shafts connected thereto, wheels on the shafts, indicating tablets, bars pivoted thereto, co-acting cams on the wheels and bars adapted to oscillate the proper bars by rotation of the dials to elevate the indicating tablets.

324. In a cash register actuating dials, shafts connected thereto, wheels on the shafts, indicating tablets, bars pivoted thereto, co-acting cams on the wheels and bars adapted to oscillate the proper bars with the rotation of the dials to elevate the indicating tablets, a registering mechanism connected with one of the dials to operate when one of the dials rotate in one direction, and a registering mechanism connected with the other of said dials to operate when the dials rotate reversely.

325. In a cash register actuating dials, shafts connected thereto, wheels on the shafts, indicating tablets, bars pivoted thereto, co-acting cams on the wheels and bars adapted to oscillate the proper bars by rotation of the dials to elevate the indicating tablets, and a guide member provided with a plurality of slots to receive the bars therein.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

CHARLES SULFER.

Witnesses:
K. E. HANNAH,
C. W. HILLS.